



# Do they know who we are?

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**Institutional Biological Safety Officer,**

**Associate Director, Life Sciences Safety (BIOSAFETY) & Compliance Programs**

**IBC Administrator, ARO, ICDUR**



# Have you recently examined Biosafety job descriptions?

## Comprehensive Biological Safety Program:

**Campus** and **Outlying** facilities – Research, Teaching, Clinical Facilities

With oversight from . . .

### **Appropriate Educational Background**

**Responsible** for programs in research, teaching, diagnostic areas

**Perform** risk assessments, **Evaluate** regulatory compliance of research, teaching, training activities

**Partner** with regulatory & support offices for **oversight of**, and **support of** the scientific community

Participate in **developing & implementing procedures, programs**

Be **self-directed** and complete tasks promptly

Work with labs to **integrate** safety **into laboratory operations**

**Promote** practices based upon regulatory requirements, best management guidance, & University Policy

**Biosafety Review** of IBC and IACUC applications

**Accountable** for supporting organization's values of collegiality, integrity, initiative, excellence, civility, stewardship

**Pursue professional development**

# Have you recently examined Biosafety job descriptions?

## Biosafety Specialist

### Comprehensive Biological Safety Program:

**Campus and Outlying** facilities – Research, Teaching, Clinical Facilities

With oversight from . . .

#### **Appropriate Educational Background**

**Responsible** for programs in research, teaching, diagnostic areas

**Perform** risk assessments, **Evaluate** regulatory compliance of research, teaching, training activities

**Partner** with regulatory & support offices for **oversight of**, and **support of** the scientific community

Participate in **developing & implementing procedures, programs**

Be **self-directed** and complete tasks promptly

Work with labs to **integrate safety into laboratory operations**

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**Biosafety Review** of IBC and IACUC applications

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# Have you recently examined Biosafety job descriptions?

## Comprehensive Biological Safety Program:

**Campus** and **Outlying** facilities – Research, Teaching, Health System

With oversight from . . .

**Position ‘A’** (entry level) **BA / BS** in a biological science

**3-5 years** hands-on research experience

**0-3 years** in **biological safety**, preferably in a biomedical research facility

**MS** in biological science or related field & experience with molecular biology preferred

Eligible for or willing to obtain **certification by ABSA (RBP or CBSP)** is strongly preferred

Working level understanding of **NIH and CDC guidelines**

# Have you recently examined Biosafety job descriptions?

## Comprehensive Biological Safety Program:

**Campus** and **Outlying** facilities – Research, Teaching, Health System

With oversight from . . .

**Position ‘B’** (some experience) **MS** in biological science

**PhD** in biological science or related field is strongly preferred

**Documented** microbiology training and work experience

**5 - 7 years** hands-on experience in a **research laboratory** or related combination of education & experience

**5 years or more** experience in the field of **biological safety** in a biomedical research facility

Experience with **molecular biology techniques**

Experience **working in** or **supervising BSL-3** and / or **ABSL-3** containment research is strongly preferred

Experience **with select agents** or managing **select agents research** is strongly preferred

Documented evidence of **training programs development**

Eligible for or willing to obtain **certification by ABSA (RBP or CBSP)** is strongly preferred

Comprehensive understanding of **NIH and CDC guidelines**

# Have you recently examined Biosafety job descriptions?

## Duties / Responsibilities:

**Administer & support** development of Life Science Laboratory Safety & Biosafety Programs

**Oversight** of select biosafety program components as needed

**Review** IACUC protocols & IBC registrations using knowledge of pertinent guidelines & regulations

**Inspect** research facilities for safety & compliance. **Conduct** laboratory & vivarium inspections

**Oversight, training & guidance** for **BSL-3; ABSL-3; Arthropod** facilities; **Primary contact** intended for

**Maintain** audit and compliance records

**Provide technical guidance** to faculty & research staff

At the discretion of . . . **Provide** mentorship, training, & perform supervisory activities

**Develop, Conduct, Revise** biological safety training

**Investigate** injuries & accidents with regard to lab safety & biosafety

**Support** various occupational health programs

**Develop & Implement** emergency response procedures, & outreach programs

**Respond** (on call) to biohazardous materials incidents as appropriate

**Perform** due diligence & track select agent toxins

**Other** duties & responsibilities as assigned

# Have you recently examined Biosafety job descriptions?

## Assistant Biosafety Officer

## Associate Biosafety Officer

### Duties / Responsibilities:

**Administer & support** development of Life Science Laboratory Safety & Biosafety Programs.

**Oversight** of select biosafety program components as needed

**Review** IACUC protocols & IBC registrations using knowledge of pertinent guidelines & regulations

**Inspect** research facilities for safety & compliance. **Conduct** laboratory & vivarium inspections

**Oversight, training & guidance** for **BSL-3; ABSL-3; Arthropod** facilities; **Primary contact** intended for

**Maintain** audit and compliance records

**Provide technical guidance** to faculty & research staff

At the discretion of . . . **Provide** mentorship, training, & perform supervisory activities

**Develop, Conduct, Revise** biological safety training

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# Biosafety Officer

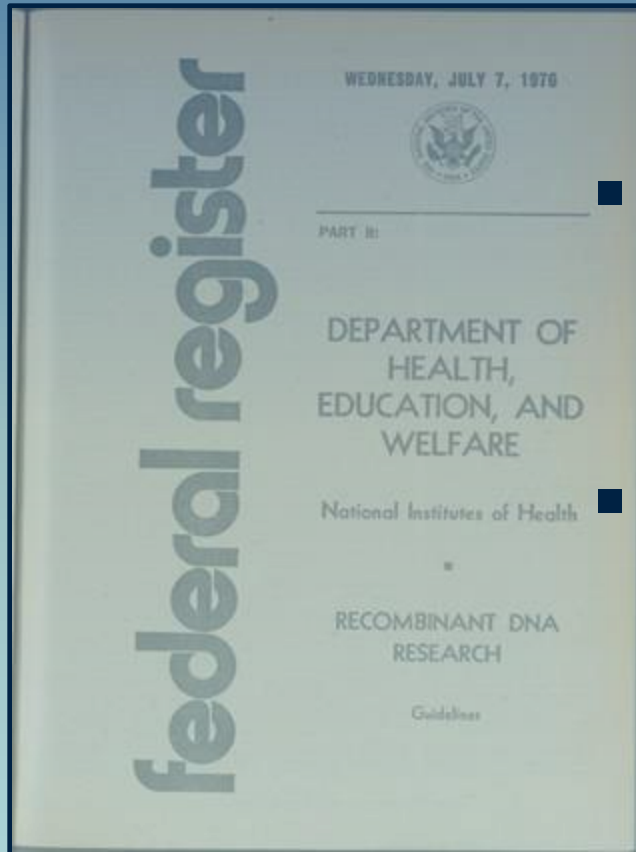


Profession	BIOLOGICAL SAFETY PROFESSIONAL (BSP) also referred to as Biological Safety Officer (BSO)
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A “Biosafety Officer” **IS** a BIOLOGICAL SAFETY PROFESSIONAL

A “BIOLOGICAL SAFETY PROFESSIONAL” is **NOT** automatically a  
“Biosafety Officer”

# Biosafety Officer



## NIH Guidelines 45 + years

- The title / job has evolved beyond the NIH Guidelines & should be owned, defined, adjudicated by the biosafety profession.
- **“Biosafety Officer” & “Institutional Biosafety Officer”** should be professional titles assigned to MAINTENANCE\* Stage roles in the profession.

[ ESTABLISHMENT • ADVANCEMENT • MAINTENANCE • WITHDRAWAL ]\*

\* Career Dynamics: Managing the Superior/Subordinate Relationship  
Baird & Kram. Organizational Dynamics, Spring 1983, V11 #4 pp46-54.

# Biosafety Officer

**Professional titles assigned to MAINTENANCE \* (senior) career roles must not be routinely used for ENTRY LEVEL, ESTABLISHMENT \* or ADVANCEMENT \* career stages.**

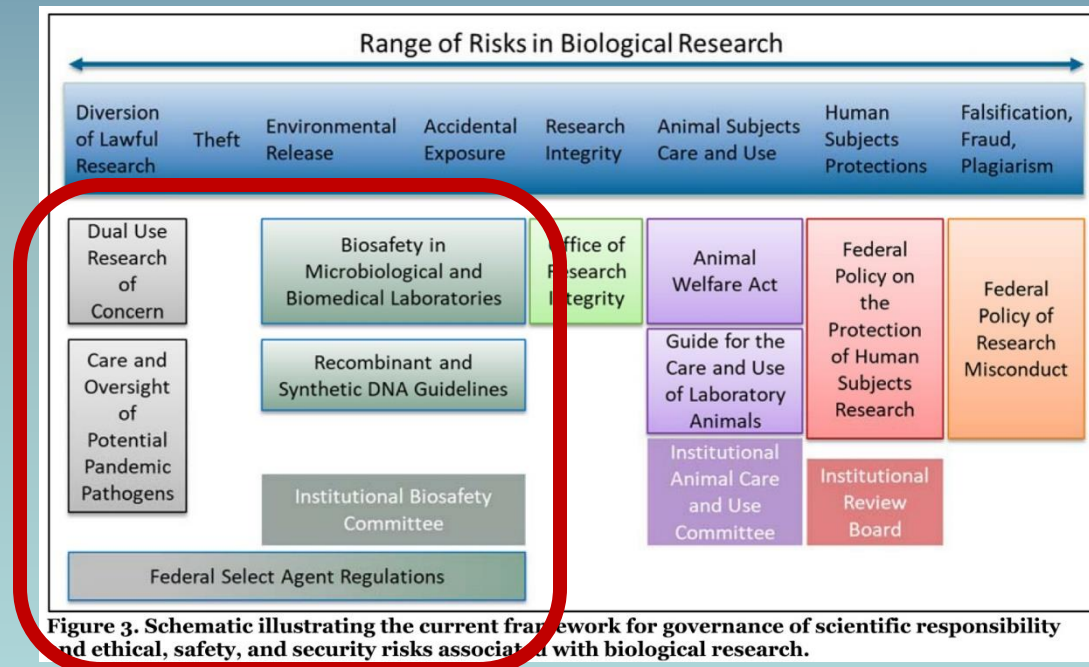
- **Is it fair to apply experience and competency expectations to biosafety professionals in their ENTRY LEVEL or ESTABLISHMENT career stages?**
- **Establish a Biosafety Professions development framework, including professional titles with unambiguous, well-defined expectations for each.**

\* Career Dynamics: Managing the Superior/Subordinate Relationship  
Baird & Kram. Organizational Dynamics, Spring 1983, V11 #4 pp46-54.

# I am a Biosafety Officer

## Life Sciences Safety & Compliance Programs (a very large umbrella)

### Compliance & Oversight Challenges



Roadmap for Biosecurity and Biodefense Policy in the United States Released: 16 July 2018

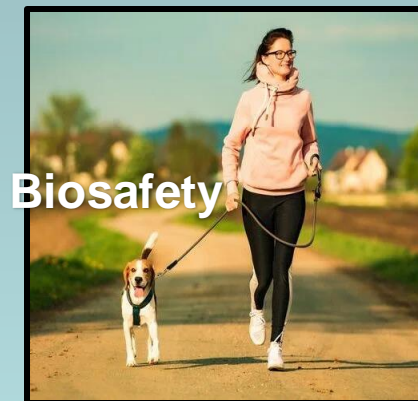
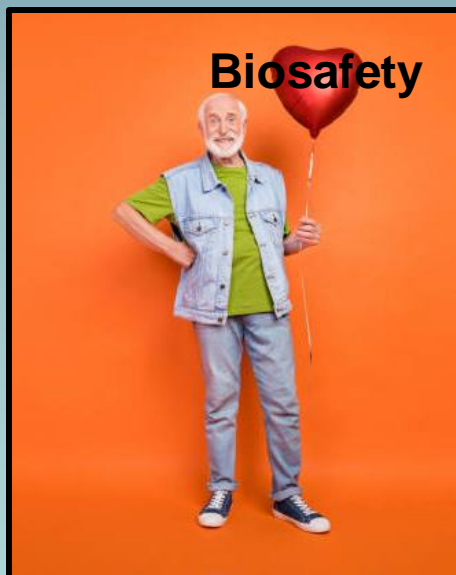
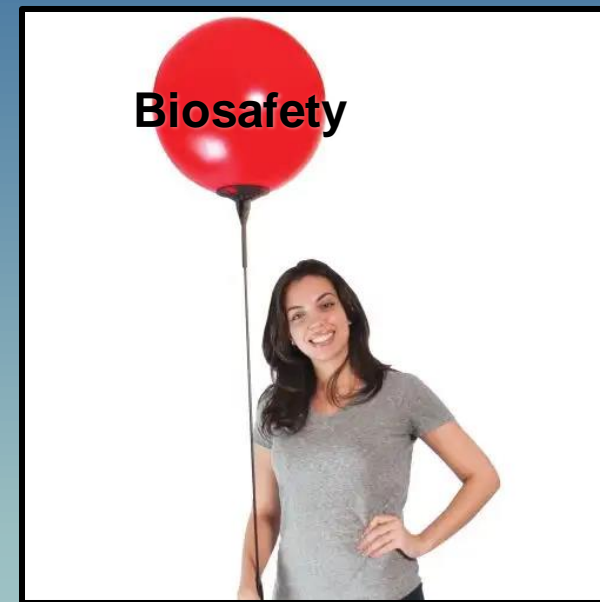
Kavita M. Berger, Diane DiEuliis, Corey Meyer, and Venkat Rao  
Gryphon Scientific, National Defense University, Parsons

# I am a Biosafety Officer

## What They Think We Do:

### BIOSAFETY RECRUITMENT TITLES:

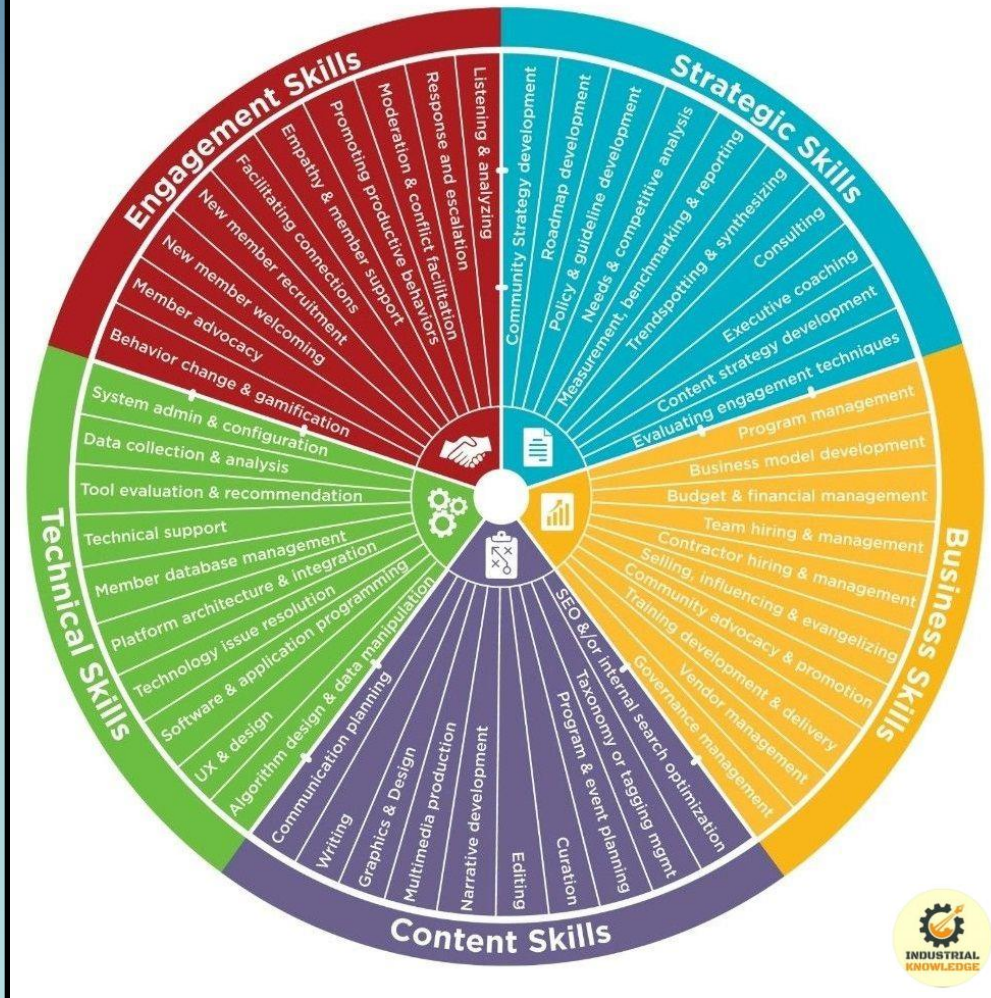
- officer
- professional
- assistant
- associate
- advisor
- manager
- coordinator
- management advisor
- director
- technical officer
- facilities manager
- EHS biological
- safety specialist
- EHS specialist
- lab safety
- EHS manager
- research safety
- development manager
- scientist
- inspector
- compliance analyst
- engineer
- safety officer
- administrator
- specialist





# I am a Biosafety Officer

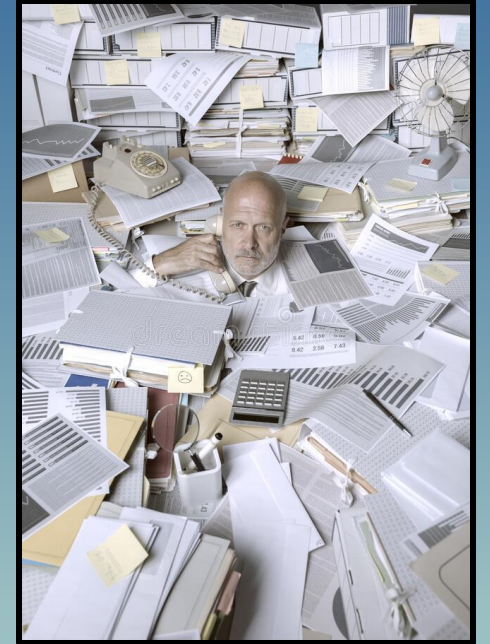
## Leadership Skills



## Leadership Skills

- TECHNICAL
- ENGAGEMENT
- STRATEGIC
- BUSINESS
- CONTENT

# I am a Biosafety Officer



# Biosafety the Profession

## **Guidelines for Biosafety Laboratory Competency**

CDC AND THE ASSOCIATION OF PUBLIC HEALTH LABORATORIES  
Morbidity and Mortality Weekly Report - April 15, 2011 - Supplement / Vol. 60

## **Quantifying Competency in Biosafety: Adaption of the Instructional Systems Design Methodology (ISD) to Biosafety and Laboratory Biosecurity**

Patricia Delarosa , Sarah Kennedy, Martin Jones, Melina Kinsey, and Lolly Gardiner  
Applied Biosafety Vol. 16, No. 3, 2011, pp 177- 183

## **Biosafety professional competence, CWA 16335**

European Committee for Standardization , Comité Européen De Normalisation (CEN), September 2011

## **How to be a Laboratory Biosafety Officer (first edition)**

by Philip A. Dauterman, MD  
CreateSpace Independent Publishing Platform, First Edition, January 30, 2018

## **Moving Biorisk Management from Individual Heroics to Institutional Excellence**

LouAnn C. Burnett, MS, CBSP  
61st Annual Biosafety & Biosecurity Conference, October 14-17, 2018, Session XVI: Biosafety Program Management

## **Competency-based Biosafety Officer Position Description (PD) Template**

Association of Public Health Laboratories (APHL)  
Introductory Memorandum: Recruiting Biosafety Officers, November 2018

## **Laboratory Biosafety Manual, Fourth Edition, and Associated Monographs**

World Health Organization (WHO), 2020

# Biosafety the Profession

## State of the Biosafety and Biosecurity Profession (ABSA International)

Online Forum - Time: Mar 2, 2022, 1:00 PM

### We Know There's No Biosafety Pipeline, But Can We Make One?

Paul Meechan, PHD, MPH, RBP, CBSP (ABSA)

Keynote, ChABSA Annual Scientific Symposium, June 15, 2022

### Biosafety / Biorisk Management Certificate program at Indiana University of Pennsylvania (IUP)

Posted on 8/29/22, USDA Grant

curriculum completed within a year, coursework to begin by fall 2023

### A Means of Codifying Safety Cross-Training Knowledge Expectations for Biosafety Professionals

Robert J. Emery, Scott J. Patlovich, Kristin G. King, and Janelle Rios

Applied Biosafety VOL. 28, NO. 1 | 2023 | pp 11-21

### Biosafety Needs to Redefine Itself as a Science

Antony Schwartz, Andrea Vogel, and Mary Brock

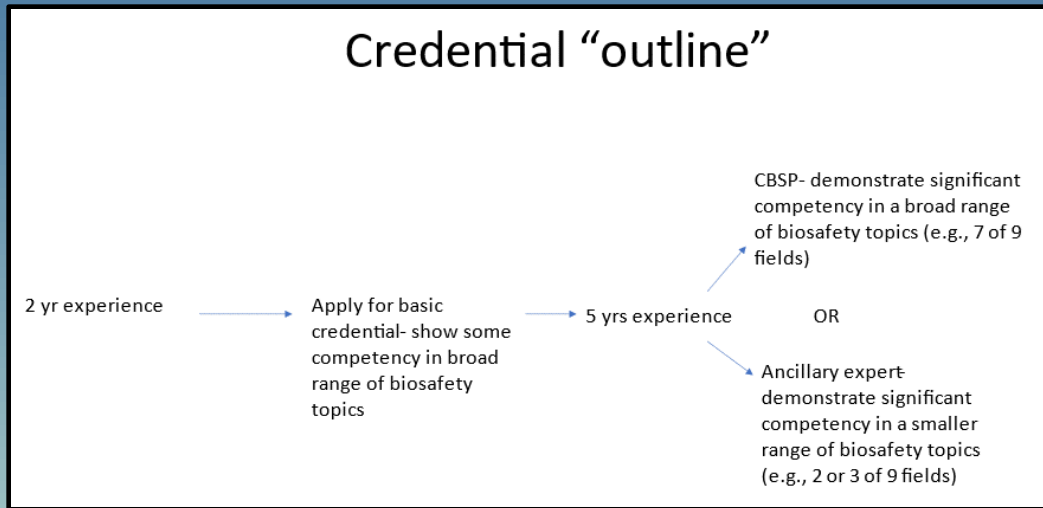
Issues In Science and Technology, Vol. XXXIX, No. 3, Spring 2023

### The Making of a Biosafety Officer

David R. Gillum

Issues In Science and Technology, Vol. XXXIX, No. 3, Spring 2023

# Biosafety the Profession



	RBP	CBSP
Academic requirement	None or not biological or related science major	
Time in service	13 year-equivalents	
Academic requirement	BA/BS in biological or related sciences	BA/BS with 6 semester/9 quarter cred micro
Time in service	6 year-equivalents	6 year-equivalents
Academic requirement	MS in biological or related sciences	MS with 20 semester/30 quarter cred micro
Time in service	4 year-equivalents	4 year-equivalents
Academic requirement	Ph.D in biological or related sciences	PhD with 30 semester/45 quarter cred micro
Time in service	3 year-equivalents	3 year-equivalents

1. A basic or entry level professional credential (**name to be determined**) that would designate a person as a biosafety professional, with some breadth, but perhaps not with the depth a senior professional would possess. The person would demonstrate basic competency by submitting a portfolio of work that demonstrated a good, but not expert, grasp of the competencies needed to oversee biosafety programs.
2. After additional time, perhaps five years, the person would be eligible to apply for one of two credentials- CBSP (US or International) or an **Ancillary expert credential (to be determined)**. The CBSP is already well known and will not be further discussed here. The Ancillary expert credential would be **designed for those with expertise in some, but not enough areas of competency that would allow them to oversee a comprehensive biosafety program**. A person overseeing an IBC, or a facilities person with expertise in the design of containment facilities, or a senior administrator with familiarity with some aspects of a program might all be eligible. This again would likely be a portfolio submission process, demonstrating expertise in some of the competencies designated as required for expert status. We see the Ancillary expert credential essential for the long-term survival of ABSA International. Many of our newer members are not "traditional" biosafety officers, they share a passion for biosafety, but their role may include only part of what is currently considered oversight of a "comprehensive biosafety program"- the current requirement for credentialing. Continuing to omit these individuals from a credentialing program will erode the appeal of ABSA International in the long run.

# Biosafety the Profession

- Starting at the “TOP” Define / Establish minimum criteria for assigning titles:  
**Biosafety Officer & Institutional Biosafety Officer**
- Define / Establish subordinate biosafety role titles:
  - Biosafety Specialist ■ Assistant ■ Associate ■ Senior Associate ■
- Define / Establish minimum **Competency & Performance** criteria for titled roles
- Is this even possible? That is why we are here. . .

Thank You