IFBA: Working Together Towards Global Health Security

T. Bruce Anderson
Chair, Certification Body
International Federation of Biosafety Associations

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International Federation of Biosafety Associations

- IFBA has now grown to 46 Member regional and national biosafety associations
- IFBA Observer organizations - government, academia, NGOs, international agencies, professional associations from around the world with an interest in biosafety

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Our Global Biosafety Community

- How do we empower this network of biosafety organizations and thousands of biosafety professionals?
- How can we make a sustainable difference for global health security?

Working Together Makes a Difference

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Working Together

- WHO High-level Stakeholders Meeting on Advancing Global Health Security
  - Recognized the importance of working together and the role for civil society and biosafety associations

'We need inclusive and accountable partnerships'

The meeting highlighted the importance of evidence-based joint planning, information sharing, and strengthening of intersectoral collaboration through national and international partnerships.

Within countries, coordinated, multisectoral solutions are needed, with buy-in from all of society; and while countries bear ultimate responsibility for IHR compliance, non-state actors must also take greater responsibility to provide guidance and assistance in contexts where it is most needed.

Global Health Security Agenda

- IFBA is a member of the Global Health Security Agenda
  - Action Package Prevent 3 (APP3) on Biosafety and Biosecurity

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Global Health Security Agenda APP3WG

IFBA's commitments to GHSA APP3

In collaboration with IFBA's network of regional and national biosafety associations:

- Facilitate partnerships between IFBA's member biosafety associations and national governments in implementation of APP3 goals and objectives, and obligations under a variety of instruments (BTWC, UN1540, IHR)
- Strengthen linkages between public health, animal health and security communities
- Provide guidance on developing a national biosafety/biosecurity framework, legislation and guidelines related to the management of biological risks including oversight and enforcement mechanisms to ensure compliance

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Global Health Security Agenda APP3WG

IFBA's commitments to the GHSA APP3

- Certify the competency of biosafety officers and individuals handling biological materials in biorisk management, biosecurity, biocontainment facilities, waste management and biological safety cabinets

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IFBA's Certification Program

- Independent assessment for competent performance in a variety of technical disciplines related to biosafety & biosecurity
  - *Developed in collaboration with worldwide stakeholders accordance with ISO 17024*
  - *Ongoing assessment (recertification requirements every 5 years)*

ISO 17024

ISO/IEC 17024:2012

Conformity Assessment - General Requirements For Bodies Operating Certification Of Persons

ISO/IEC 17024:2012 contains principles and requirements for a body certifying persons against specific requirements, and includes the development and maintenance of a certification scheme for persons.

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Exam Content

- Exam content is based on the Body of Knowledge for each technical discipline (developed by international subject matter experts from all regions of the world)

Domain A – Fundamentals of Biorisk Management Systems

1. List the goals of an effective biorisk management system;
2. Describe the fundamental elements of a biorisk management system;
3. Identify key factors in developing a successful biorisk management system;
4. Describe the fundamental role of risk assessment and risk management in implementing a biorisk management system;
5. Describe how to measure and monitor the performance of a biorisk management system; and,
6. Describe the process of the PDCA (Plan-Do-Check-Act) principle and provide examples of how PDCA can be applied to a biorisk management system.

Domain B- CWA 15793 Laboratory Biorisk Management

7. Describe what the CWA 15793 is;
8. Define CWA 15793 terminology including biorisk, biosafety, biosecurity, and biorisk management system;
9. Identify the fundamental components of the CWA 15793;
10. Describe how the CWA 15793 can be used to establish, maintain, review and improve a biorisk management system; and,

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Professional Certifications Offered

- Professional Certification currently offered in 5 different technical disciplines
    - Biorisk Management *(Certification in Biorisk Management is a pre-requisite to all other certifications)*

Exam Blueprint Professional Certification in Biorisk Management Passing Score – 74%	
Domain	**Number of Questions**
A) Fundamentals of Biorisk Management Systems	18
B) CWA 15793 Laboratory Biorisk Management	16
C) Implementing a Biorisk Management System	42
D) Biorisk Management Roles & Responsibilities	24

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Professional Certifications Offered

- Biosecurity
- Biological Waste Management

Exam Blueprint Professional Certification in Biosecurity Passing Score – 73%	
Domain	**Number of Questions**
A) Biosecurity Conventions, Guidelines and Standards	30
B) Biosecurity Risk Assessment & Program Management	23
C) Physical Biosecurity Measures	13
D) Pathogen Accountability	8
E) Personnel Reliability	14
F) Dual-Use & Bioethics	12

Exam Blueprint Professional Certification in Biological Waste Management Passing Score – 72%	
Domain	**Number of Questions**
A) Types and Risks of Biological Waste	27
B) Biological Waste Management	35
C) Treatment & Disposal of Biological Waste	21
D) Chemical Disinfection and Sterilants	11
E) Validation & Efficacy Monitoring	6

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Professional Certifications Offered

- Biosafety Cabinet Selection, Installation & Safe Use
- Biocontainment Facility Design, Operations & Maintenance

Exam Blueprint Professional Certification in Biosafety Cabinet Selection, Installation & Safe Use Passing Score – 70%	
Domain	**Number of Questions**
A) Biosafety Cabinet Guidelines & Standards	13
B) Types, Proper Selection and Placement of Biosafety Cabinets	43
C) Safe Use and Maintenance of Biological Safety Cabinets	29
D) Certification of Biosafety Cabinets	15

Exam Blueprint Professional Certification in Biocontainment Facility Design, Operations & Maintenance Passing Score – 71%	
Domain	**Number of Questions**
A) Biocontainment Guidelines & Standards	15
B) Programming, Planning, Design & Construction	44
C) Commissioning, Validation & Certification	20
D) Facility Operations & Maintenance	21

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Exam Delivery

- Biorisk Management exams are offered in multiple languages
  - English, French, Russian, Arabic, Spanish, Turkish

ПС в Управление Биорисками - Содержание Экзамена

Профессиональная Сертификация в Управлении Биорисками - Содержание ПС Экзамена, Примерные Вопросы и Рекомендации

Профессиональная Сертификация (ПС) IFBA в Управлении Биорисками идентифицирует лиц с выявленной компетенцией в основополагающих принципах & практике управления биорисками. Действительная ПС в управлении биорисками является предварительным условием сертификации, которая требуется от кандидатов, для того, чтобы они имели право подать заявку на сертификацию IFBA в дополнительных технических дисциплинах. Кандидаты, которые готовы подать заявку на сертификацию в Управлении Биорисками, могут обратиться в любое время и сдать экзамен - не существует никаких конкретных требований приемлемости, предварительных условий и сроков.

Наметка Экзамена Профессиональная Сертификация в Управлении Биорисками	
Зона	**Количество вопросов**
A) Основы Систем Управления Биорисками	18
B) CWA 15793 Управление Лабораторными Биорисками	16
C) Внедрение Системы Управления Биорисками	42
D) Роли и Обязанности по Управлению Биорисками	24

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Exam Delivery

- Exams are offered online and in paper-based sessions
  - Only English version of exams are offered online at this time
- In conjunction with our IFBA Member Biosafety Association conferences and other events
  - **Separation between training & examination**
  - **IFBA does not offer training**
  - **Members & Partners offer pre-exam training and IFBA administers exams**

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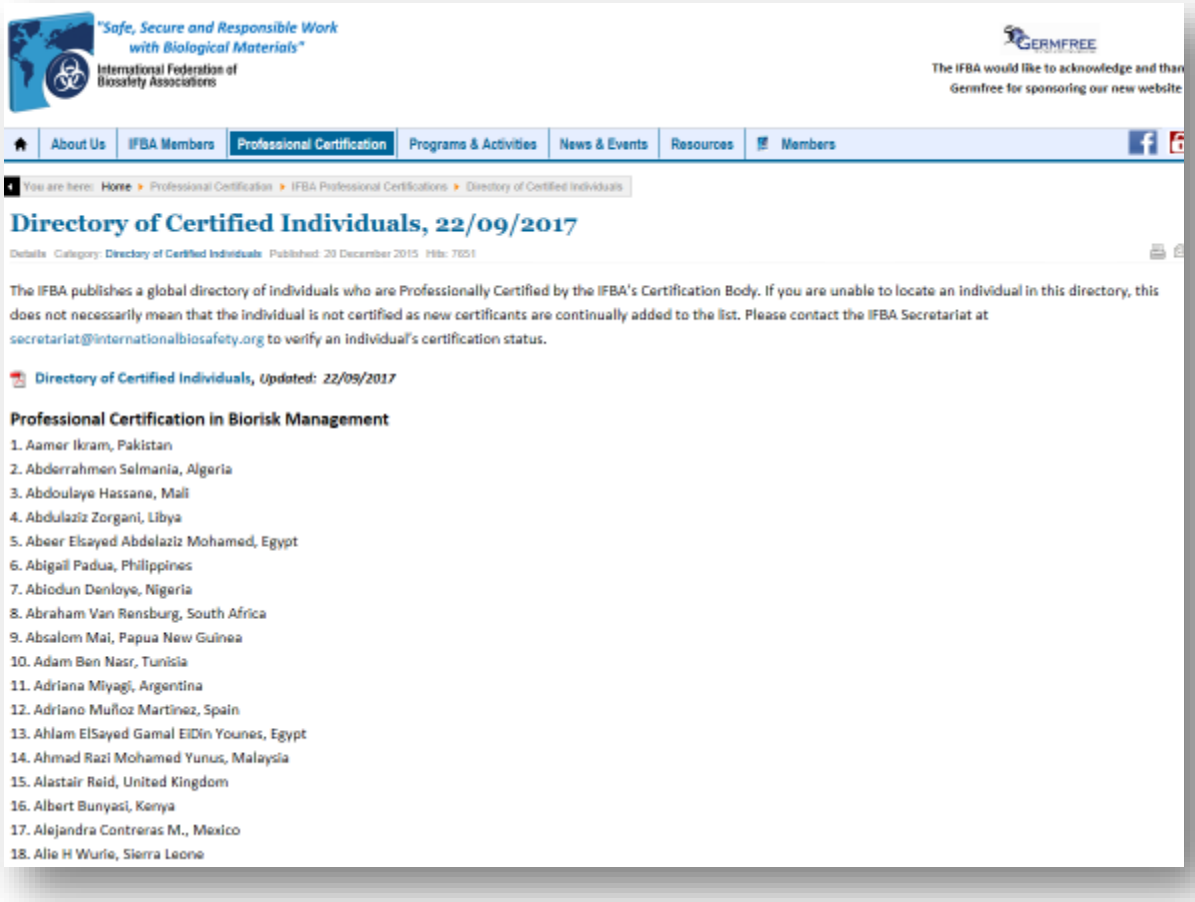
Directory of Certified Individuals



"Safe, Secure and Responsible Work with Biological Materials"
International Federation of Biosafety Associations

GERMFREE
The IFBA would like to acknowledge and than
Germfree for sponsoring our new website

About Us | IFBA Members | Professional Certification | Programs & Activities | News & Events | Resources | Members

You are here: Home ▸ Professional Certification ▸ IFBA Professional Certifications ▸ Directory of Certified Individuals

Directory of Certified Individuals, 22/09/2017

Details Category: Directory of Certified Individuals Published: 20 December 2015 Hits: 7651

The IFBA publishes a global directory of individuals who are Professionally Certified by the IFBA's Certification Body. If you are unable to locate an individual in this directory, this does not necessarily mean that the individual is not certified as new certificants are continually added to the list. Please contact the IFBA Secretariat at secretariat@internationalbiosafety.org to verify an individual's certification status.

Directory of Certified Individuals, *Updated: 22/09/2017*

Professional Certification in Biorisk Management

1. Aamer Ikram, Pakistan
2. Abderrahmen Selmania, Algeria
3. Abdoulaye Hassane, Mali
4. Abdulaziz Zorgani, Libya
5. Abeer Elsayed Abdelaziz Mohamed, Egypt
6. Abigail Padua, Philippines
7. Abiodun Denloye, Nigeria
8. Abraham Van Rensburg, South Africa
9. Absalom Mai, Papua New Guinea
10. Adam Ben Nasr, Tunisia
11. Adriana Miyagi, Argentina
12. Adriano Muñoz Martinez, Spain
13. Ahlam ElSayed Gamal ElDin Younes, Egypt
14. Ahmad Razi Mohamed Yunus, Malaysia
15. Alastair Reid, United Kingdom
16. Albert Bunyasi, Kenya
17. Alejandra Contreras M., Mexico
18. Alie H Wurie, Sierra Leone

www.internationalbiosafety.org

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- Use the designation "IFBA Professional Certification"
- Valid for a period of 5 years
  - specific recertification requirements must be met to maintain certification


International Federation of Biosafety Associations

The Certification Body certifies that

L. Michael Weaver

has successfully demonstrated competence for

Professional Certification in Biorisk Management

ID Number: XMI4366684

Date: December 14, 2016
(Valid for a period of 5 years)

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T. Bruce Anderson
Chairman of the Certification Body

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Certified Individuals Around the Globe

- More than 65 countries around the globe have participated in the program
- Issued over 750 certifications

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IFBA Global Mentorship Program

- Fostering regionally and culturally relevant, sustainable biosafety networks through peer mentoring and global collaboration
  - 33 mentees paired with 29 mentors
  - mentors must hold 2 IFBA Professional Certifications
  - monthly discussion topics (e.g. risk-based approaches to biosafety)

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IFBA Global Mentorship Program

Month 2 - July 2019

This Month's Topics:

- Risk-Based Approaches to Biosafety and Biosecurity
- IFBA Professional Certification Highlight: Biorisk Management
- Mentor/Mentee Highlight – Meeting in Addis Ababa, Ethiopia

Quick Links / Resources:

- IFBA Website (new version coming soon!)
- Fill Out an Online Progress Report
- Reading 1: Laboratory Biosafety and Biosecurity Assessment Technical Guidance Document (IFBA & SANDIA National Laboratories)
- Reading 2: Risk-Based Reboot for Global Lab Biosafety (Kojima et al., 2018) – Document included in email distribution (check your email inbox)

A Note from the Program Coordinator...

Dear Program Participants,

It is such a pleasure to see such a positive start to this program cycle! I have been in touch with many of you and your Mentee/Mentor partner, as well as have been slowly starting to receive your first Progress Reports. As noted in my emails, Progress Reports are a short, worksheet-style electronic form that must be filled out by yourself and your partner at minimum every three months (please refer to the program itinerary for due dates). With that said, you are more than welcome to complete and submit Progress Reports more often if it helps you keep track of what you and your Mentee or Mentor have been discussing. I will note that your completed Progress Reports *should be detailed*, and include a summary of your activities or results of recent discussion from your Mentor or Mentee. Please use the template that was sent to you via email – if you cannot access the online platform due to technical difficulties, please let me know so that I can send you the same template in an offline version (PDF or Word). These Reports will serve as supporting documentation for when a Mentor applies for Recertification, and will be shared with the IFBA Recertification Committee if participation in the IFBA Global Mentorship Program is used for recertification points. As a final note, the Secretariat is currently looking for photos

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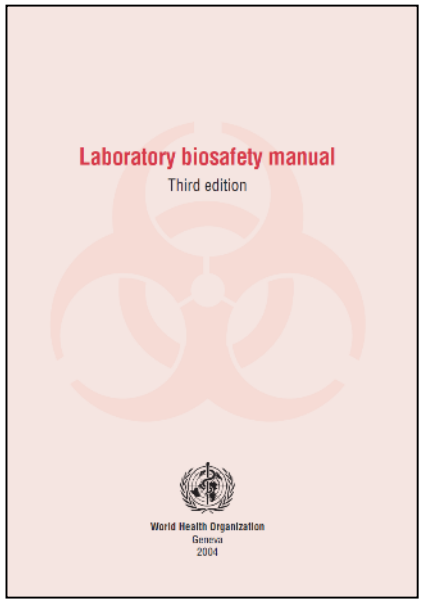
Risk-based Approaches to Biosafety

- New 4th edition WHO Laboratory Biosafety Manual
  - Shift towards risk-based approaches
  - Eliminates pre-defined risk groups and lab biosafety levels as described in 3rd edition
  - Expected to be released in late 2019



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Risk-based Approaches to Biosafety

- New 4th edition WHO Laboratory Biosafety Manual
  - Describes a minimum set of risk control measures to be implemented (i.e. core requirements), augmented by a set of options for heightened control measures (e.g. HEPA filtration, effluent treatment) that may need to be applied based on the risk assessment
  - Each facility will implement control measures that are proportionate to their specific risks, and not rely on a predefined universal checklist of measures
  - Emphasis is placed on procedural and human factors, including good microbiological practices, and trained and competent staff

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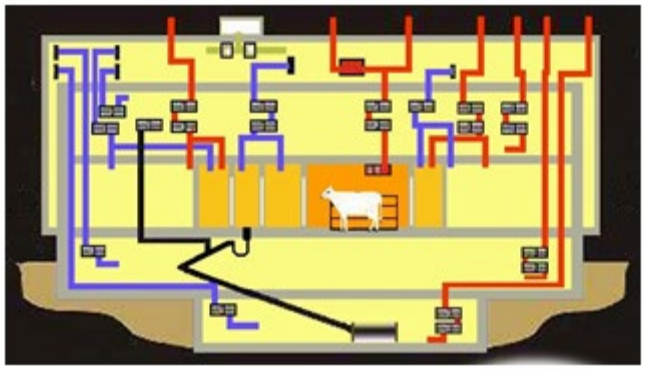
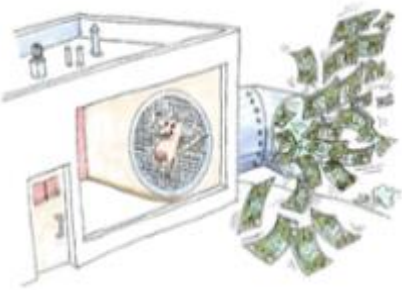
Risk-Based Approaches

- Risk-based practical solutions that can be cost-effectively and locally sustained over the long term



Don't build this.....



Big money....

Pocket change....

When all you need is this .....

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Risk-Based Approaches

- Risk-based solutions require biosafety professionals to make sound judgements that best meets the local needs
- Shift from acquiring knowledge to applying knowledge in new situations
- Requires critical thinking skills, mindset of inquiry, and effective problem-solving

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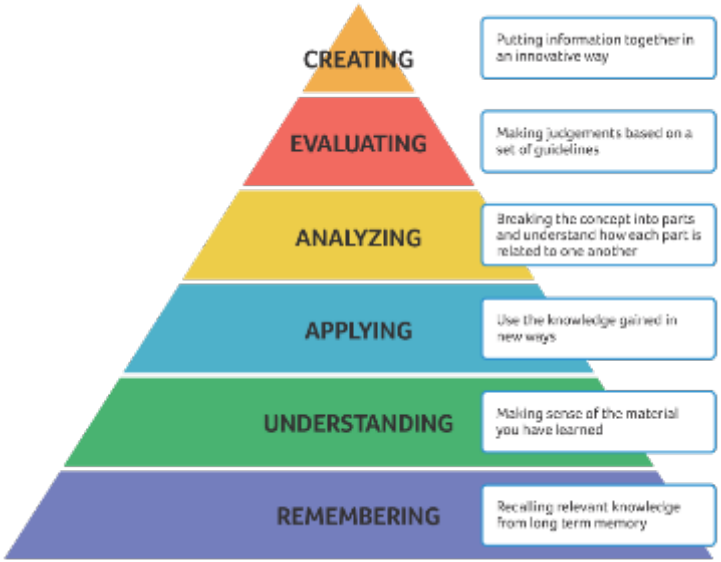
Promote Critical Thinking

- Embed critical thinking skills in our approach to teaching biosafety
- Challenge biosafety professionals to use and apply ideas
- Present subject matter in the context of a problem or issue
- Biosafety professionals have the option of offering a judgement or assessment of possible solutions, determining which would be the better choice (wiser, justifiable, sustainable, risk-based, cost-effective)



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