

Role of Biosafety Professionals in Dual Use Research of Concern

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About NBA

- The Biosafety Act, 2009 established the National Biosafety Authority (NBA).
- The mandate of NBA is to exercise supervision and control over the development, transfer, handling and use of genetically modified organisms (GMOs) with a view to ensuring and assuring safety of human and animal health and provision of an adequate level of protection of the environment
- To promote awareness and education among the general public in matters relating to biosafety;

What is Dual-Use?

- The concept that the same piece of scientific research can be used for bad as well as good purposes.
- Well-intentioned research with beneficial outcomes may end up being misused for malicious purposes by third party.

DURC in Africa: Gaps identified by AfBSA

- Many nations in Africa, have not yet implemented the necessary legislation to provide oversight on Responsible Conduct of Science or Dual Use Research issues (e.g. meet the obligations of the BTWC) and, thus, the critical global web of protection is inadequate.
- National regulations are urgently needed to support oversight on responsible conduct of science in Institutions.
- Most Institutions are yet to establish Institutional Biosafety /Biorisk Committees (IBC)

Road map to addressing DURC: Role of Institutions

- Should develop appropriate Policies and Biorisk Management Plans that include Dual Use Research of Concern.
- Dual Use Issues should be integrated into Institutional Biosafety/Biorisk committees (IBC) Oversight process.
- IBCS should develop a screening process to ensure that potential harmful research and publications/ Dissemination of results is not overlooked
- Ensure that research is not impeded

Basic Questions on Biosafety, Biosecurity and Dual-Use

- Biosafety: How is the research done?
- Biosecurity: What research is being done?
- Dual-Use: Where is the research going?

Biosafety Questions

- Has the Organization developed a Biosafety Policy ?
- Are risk assessments, conducted qualitatively regularly, to determine the relative benefits verses potential harm of conducting or disseminating the research.
- Occupational health and safety program in place and Laboratory Acquired Infections documented?

Biosecurity Questions

- Does an Organization have a Biosecurity Policy and Plan?
- Has the Organization developed a framework of laboratory security and reliability measures that will optimize benefits, minimize risks, and facilitate the productivity of research?

Biosecurity Planning

- The Biosecurity Plan shall be a document that spells out the Institution's Biosecurity program policies and procedures that minimize the risk of intentional use of biological materials and reduce the risk of illness or death in the community.
- The Plan shall describe strategies for preventing threats and describes the protection, control and accountability for biological materials within laboratories, in order to prevent their unauthorized access, loss, theft, misuse, diversion or intentional release.
- The Plan shall also include risk management and appropriate response actions to be taken should an incident occur.

A Dual-Use Example

- Mousepox experiment
 - Australia 2001
 - Aim: induction of infertility in mice to control mouse population in Australia.
 - Insertion of the IL-4 gene into mousepox virus created super-virulence that could kill vaccinated mice.

Dual-use implications: potential application of knowledge to human viruses such as smallpox.

Dual-Use Questions

- Should this research be published, or should there be a limitation on what is published?
- Should this research have been done/funded?
- Who is responsible for the potential negative outcomes of this research?

IBC Tools for Assessing publications

- Is it likely that the knowledge, products, or technologies derived from this research could be inadvertently or deliberately misapplied by others to pose a threat to public health, agriculture, plants, animals, the environment, or materiel?
- Are the knowledge, products, or technologies associated with this research considered to be readily available and accessible to other researchers in the field?

1st

ANNUAL NATIONAL BIOSAFETY CONFERENCE

ORGANIZED BY NATIONAL BIOSAFETY AUTHORITY (NBA)

AUGUST 6-9, 2012 AT KICC, NAIROBI, KENYA

CONFERENCE THEME: STRENGTHENING NATIONAL CAPACITY FOR BIORISK MANAGEMENT

ABOUT THE CONFERENCE

The conference will be characterized by

- Two Full Days of Intensive Pre-Conference Courses
- Two Full Days of State of the Art Keynotes, Papers, and Panels
- Exhibits showcasing the latest technologies in facility design, service providers and product safety
- Invaluable Networking with Biosafety Professionals

PRE-CONFERENCE WORKSHOPS

Pre-conference workshops on:

- National Biosafety Regulations
- Equipment maintenance (primary and secondary barriers)
- Risk assessment and mitigation
- Transport of Biological materials
- Leadership and Quality Management Systems in Biorisk Management
- Occupational Health and Safety
- Principles of Biohazard Waste Management, Disinfection and Decontamination
- Effective Biorisk and Biosafety Committee

CONFERENCE TOPICS

Conference Topics will include presentations on various subtopics which include:

- Current Laboratory Biosafety and Biosecurity issues on emerging diseases World wide
- Biotechnology and Genetic Engineering



- Biosafety and Biosecurity issues/solutions in the hospital, research, industry and in the field
- Dual use research
- Biosafety and Biosecurity concerns, outbreaks, detections, diagnosis and response to endemic, emerging and re-emerging diseases.
- National and International Regulations on Biosafety and Biorisk
- Biosafety concerns/mitigations for Genetically Modified Organisms
- Many others

COST OF PRE-CONFERENCE COURSES

CATEGORY	HALF DAY	FULL DAY
STUDENTS	KSHS. 3,000	KSHS. 5,000
PROFESSIONALS	KSHS. 5,000	KSHS. 10,000

CONFERENCE REGISTRATION

CATEGORY	COST FOR 2 DAYS
STUDENTS	KSHS. 7,500
PROFESSIONALS	KSHS. 10,000

**IMPORTANT DATES: EARLY REGISTRATION BEFORE JUNE 30TH 2012. LATE REGISTRATION AFTER JULY 15TH 2012
DEADLINE FOR SUBMISSION OF CONFERENCE ABSTRACT JUNE 15TH 2012**



For more Information, Registration & Abstract Submission contact:
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Thank You