Sustaining International Biorisk Management Best Practices Following a Comprehensive Biosafety and Biosecurity Training Session

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Background Info – Controlling Biorisks (CBR)

- **An introductory Biorisk Management Course offered by Sandia National Laboratories, International Biological Threat Reduction department**

- **2010 – 2011 CBR Trained 55 Participants from Afghanistan, Iraq, Yemen, Jordan, Pakistan, Japan, Kenya, Uganda, Tanzania, South Africa, Denmark and the USA**

- **The focus of CBR is to provide a broad understanding of biorisk management best practices in the areas of biorisk assessment, mitigation and performance.**

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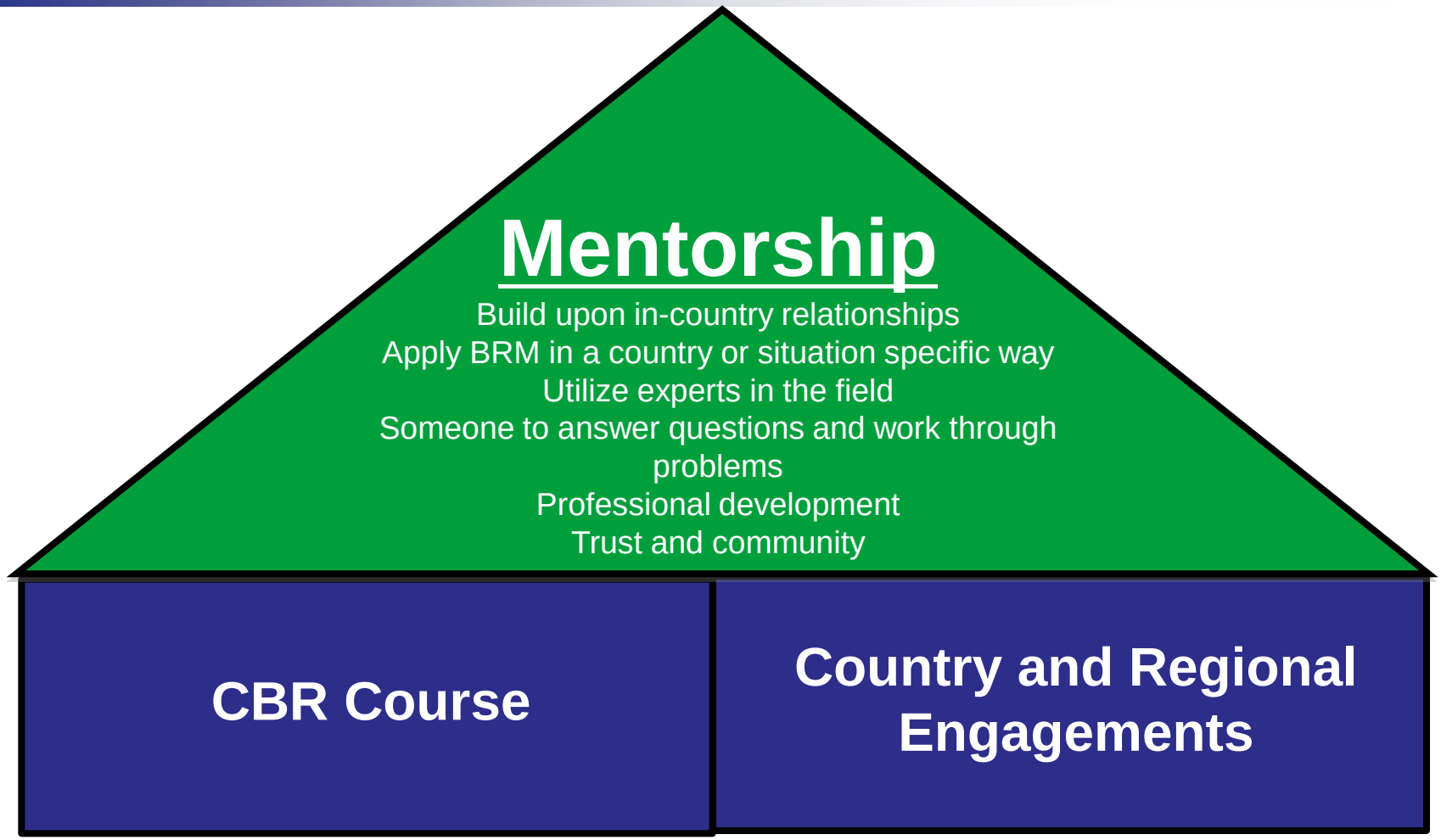
CBR Follow-up Strategy



CBR Follow-up Project Objectives

Goal

The CBR Follow-up Project is designed to provide support for implementing biorisk management solutions at the participants' home institutions.

Strategy

10 participants were selected from previous CBR courses

Action

The participants were guided through the process of performing a risk assessment and subsequent risk mitigation plan for their proposed project.

Sustainability

Participants were not provided with any additional resources, besides mentorship and an opportunity to present their work at an international biosafety conference.

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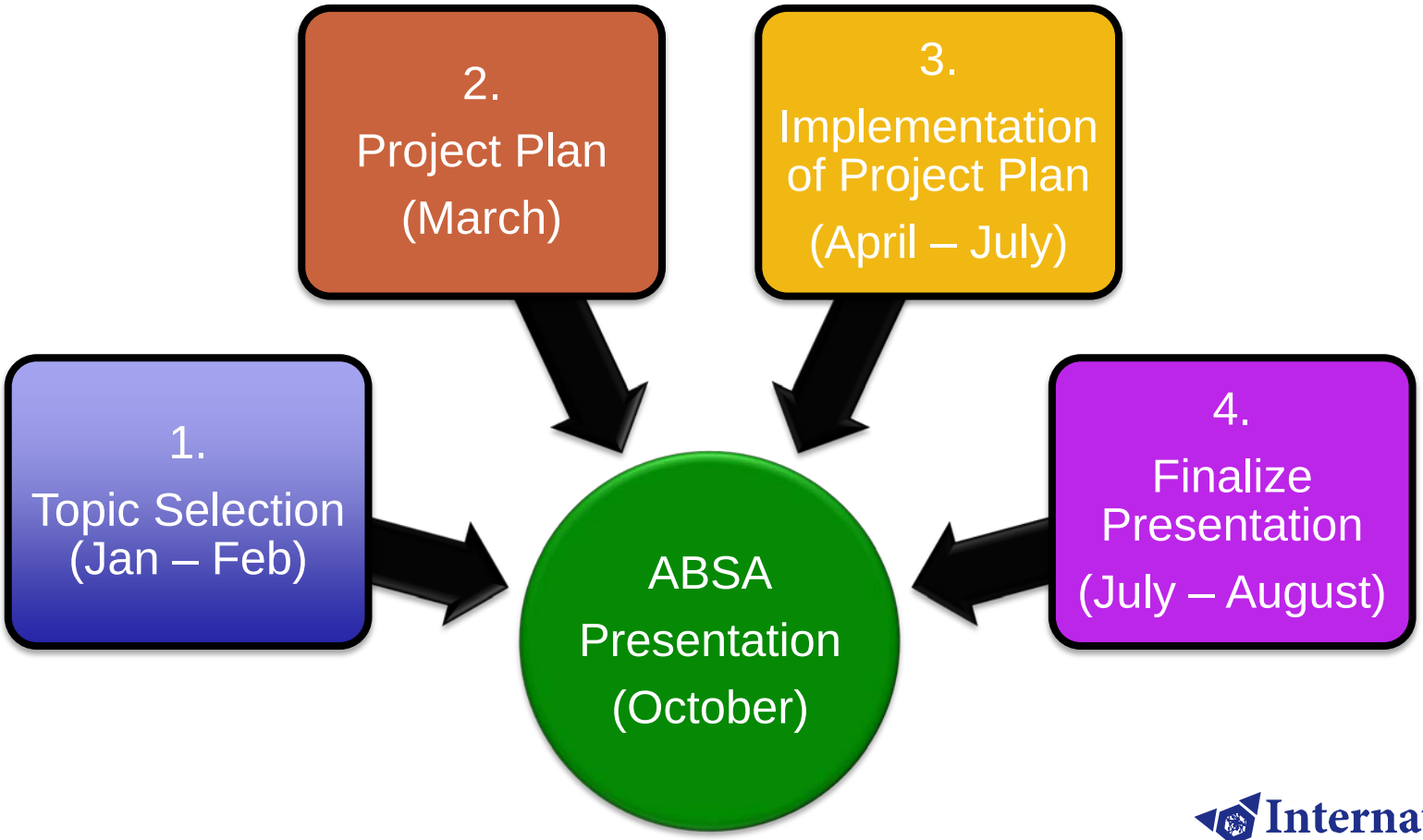
Project Outline



Projects

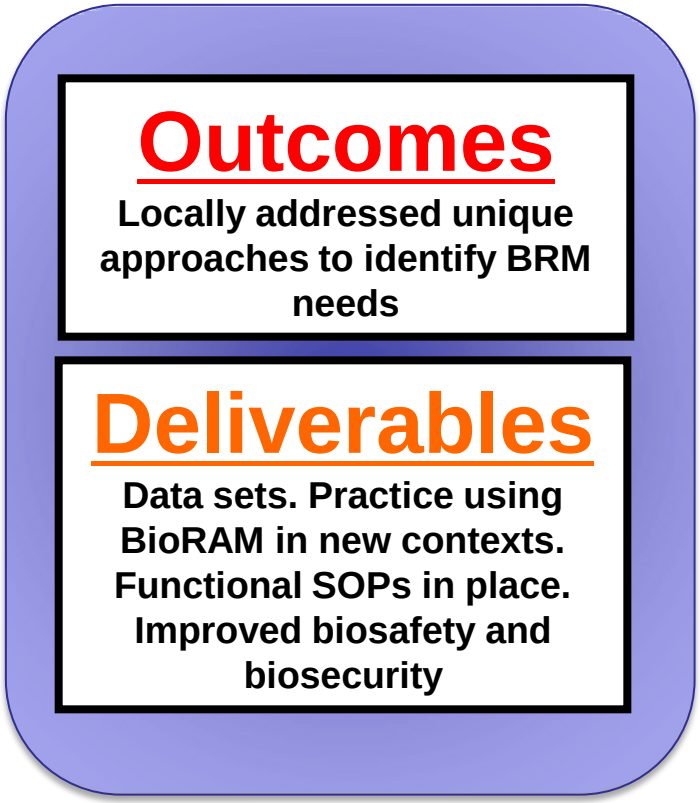
Action in Risk Assessment

Comparative

Using current risk assessment data to influence mitigation measures in a proposed bioscience building

Perceptual

Using a survey developed to assess peoples perceptions about BRM in a facility to identify needs. Assayed attitudes about a particular BRM process.



Strategic

Using risk assessment data in a to develop an incident response plan. Also to influence future, role specific, training needs

Working

Assessing SOP development needs and drafting SOPs. SOP Rubric. Assaying communication challenges during a BRM program. Identifying current disinfection/decontamination needs

Mitigation Implementation

Training

Role specific from perceptual survey. Topic specific – disinfection, access controls, shipping. Developed trainers from other groups now have tools from which to apply their skills

SOPs

Functional set added into a larger group (Kenya and Uganda) training strategies. Access control process

Outcomes

Practice using DATA to influence mitigation measures

Deliverables

Locally specific mitigation measures in place. Included performance metrics from the start.

Administrative Controls

Risk assessment used to influence policy – strategic planning (building) for a facility based on current procedures happening in the laboratory.

Improved Risk & BRM Communication

Among departments, regulatory bodies and with management and leadership within a facility

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Lessons Learned

- **An applied, robust, reproducible, and meaningful risk assessment is HARD.**
  - How to get data, how to ask the right questions, sensitivities – why are you collecting data, what to do with all the data, how to analyze it, how to translate it into suggested mitigation strategies.
- **Mentorship projects take a lot of time**
  - Mentors and the participants
- **Communication is key**
- **Flexibility is a must**

Outcomes

Created a foundation for future biosafety and biosecurity improvements

Trained, qualified, experienced, and confident individuals who can, on their own, promote biorisk management best practices.

Broader context - Created a network to build upon individual goals with existing projects

- University setting perceptual survey positive dual use
- Shipping training with integrated SOP training
- Trainer development – relevant topics
- Professional development – in hand strategic project plans, international conference

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Next Steps

- **Pilot project – We want to know how we did.**

Student's perspective, tangible deliverables – assign numbers. Develop and describe strategy.

- **Measured success – Show that participants who took part in both the CBR course and the follow-up mentorship program have had more measured success at achieving their biorisk management goals.**

Acknowledgements

The Participants

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