

Personnel Reliability
at the
Galveston National
Laboratory
University of Texas
Medical Branch

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## Select Agent Research Program at UTMB

**Secure Select Agent Facility** 

BSL-2 52,634 net ft<sup>2</sup>

BSL-3 29,713 net ft<sup>2</sup>

BSL-4 14,330 net ft<sup>2</sup>

>4 years of safe and secure BSL-4 operations

~380 SRA-approved Employees

FY10 Security Costs: > \$4,000,000

Focus: Basic pathogenesis and discovery research GLP validation of vaccines and therapies



A deeply engrained culture of safety stems from a strong team spirit

Two multi-disciplinary committees advise the RO and multiple AROs

Active support and engagement of the highest levels of university administration

**Extensive community outreach** 

Web-based posting of potential research-related exposures to any infectious agent <a href="http://www.utmb.edu/GNL/safety/report.shtml">http://www.utmb.edu/GNL/safety/report.shtml</a>



## Notable Similarities and Differences in UTMB's Current BSAT Personnel Policies and Federal PRP Programs

Shared requirement for DOJ SRA and CDC registration q5 yrs

No consolidated, formal PRP exists at UTMB Rules, regulations reside within multiple distinct UTMB policies State institution, not a federal agency, subject to state laws

UTMB 'Level 2' Security Check on employment (Acxiom)
Pre-employment drug screen (and q3 yrs for BSL-4 staff)
No two-person rule for accessing BSAT stocks
Live and taped video of BSAT stocks only at BSL-4
Use of deadly force is authorized to prevent unauthorized access



### **Other Current UTMB Policies**

Mandatory annual training for all BSAT users
Formal annual attestation by BSAT users of non-restricted status
Full medical examination with mini-mental for BSL-4 staff q3 yrs

Institutional promotion of a culture of "self-reporting"
Emphasis on PI responsibility
Containment Lab Scientific Directors
Biosafety and biosecurity staff recognized as part of the "team"
Active RO Advisory Committee
Multi-disciplinary Biocontainment & Risk Assessment Committee



### Considerations for a More Formal PRP at UTMB

### Why?

- ☐ Imperative to continuously assess and improve operations.
- Need to assure local and national stake-holders that all possible measures are being taken to ensure the safety and security of BSAT operations.
- ☐ Recognition that the ability to conduct research at high containment and with BSATs is a privilege, not a right.



# Considerations for a More Formal PRP at UTMB How?

- Need to respect the privacy of individuals.
- Need to ensure that a culture of "self-reporting" is not replaced by a culture of "big brother is watching", and that individuals are not punished for temporary suspension of access.
- ☐ Need to conform to state laws and employment policies.
- ☐ Need to accommodate foreign students and postdocs



## Considerations for a More Formal PRP at UTMB How?

- Need to ensure that research essential to public health and the security of our society is not unnecessarily impeded.
- ☐ Strong belief that an effective PRP is an institutional responsibility that cannot be managed by the federal government.



### **Essential Elements of a Draft UTMB PRP**

- ☐ Focus on BSL-4 staff given complexities and stress of BSL-4 research, pathogenicity of BSL-4 agents, and numbers of involved staff (~28 persons).
- ☐ Sequential, compartmentalized reviews by HR, Employee Health Service, and Biosafety Officer/ARO to protect confidentiality and ensure expert evaluation at each step:
  - HR: Employee consents, background checks, drug screen Employee Health: "Fit for duty" determination Biosafety Officer: Safety training, SRA Certifying Official (RO)
- ☐ Certifying Official approves access only with positive determinations from each preceding level of review.



### Sequential Steps in Draft UTMB PRP

- ☐ HR: Consents: Prior employment and medical records Background checks: local and national databases Drug screen, Employment offer letter with stipulations
- Employee Health: "Fit for duty" determination BSL-specific health and medical examination BSL-4: Complete physical examination Mental health: MMPI-2 and R-BANS Expert panel review as needed
- □ Biosafety Officer: BSL-specific training

  DOJ Security Risk Assessment, CDC registration
- ☐ Certifying Official (Responsible Official)



## **Other Considerations**

"Yes-No-Deferred" determination at each step of the process; to protect privacy, details of the review do not flow to
the next review level.
☐ Once granted, access can be terminated immediately by Laboratory Director, Biosafety Officer, or RO/ARO.
☐ Limited appeal process for loss of access due to biosafety concerns (Institutional Biosafety Committee).
☐ Laboratory staff encouraged to "opt out" without penalty if inter-current illness, medications, etc.



#### **Other Considerations**

Concerns about utility of formal mental health assessments				
(MMPI-2, R-BANS) and their applicability	to foreign	n-born		
students, post-docs, and staff.				

- Use of credit checks considered, but thought to be unhelpful in assessing reliability, difficult to standardize assessment across employee groups, and possibly constrained by state law.
- ☐ All staff recognize that institutional e-mail traffic is not private and always subject to review.



### **Concluding Thoughts**

☐ The scale of UTMB's BSAT research program increases the		
feasibility of a formal	PRP. Such programs may not be feasible at	
academic centers wit	h smaller BSAT research programs.	

- ☐ Close personal working relationships in a team environment are likely to be <u>much more effective</u> than any formal PRP in early recognition and management of potential reliability issues.
- ☐ There is a need for better training for supervisors regarding early recognition of potential reliability concerns.



