

University of Tennessee- Knoxville 2012 INSTITUTIONAL BIOSAFETY COMMITTEE & BIOSAFETY OFFICE ACTIVITY SUMMARY

IBC Registration Review

The UT Institutional Biosafety Committee (IBC) conducted ten meetings during 2012. A total of 40 registrations (20 three-year renewals; 20 new projects) were reviewed and approved. Registrations were received from principal investigators spanning four university research units (hereafter referred to as 'campuses'): Knoxville (UTK); Institute of Agriculture Research (AgResearch); College of Veterinary Medicine (CVM); and Graduate School of Medicine (GSM). Figure 1 illustrates the type of registration (recombinant DNA, infectious agent, biological toxin, or human materials) and number processed by campus. Figure 1 (inset) also shows the average processing time from submission to final approval by campus. Across all registrations the average approval time was 25±20 days. Additionally, there were 11 approved amendments and 11 administrative terminations (experiments concluded or faculty relocation/retirement).

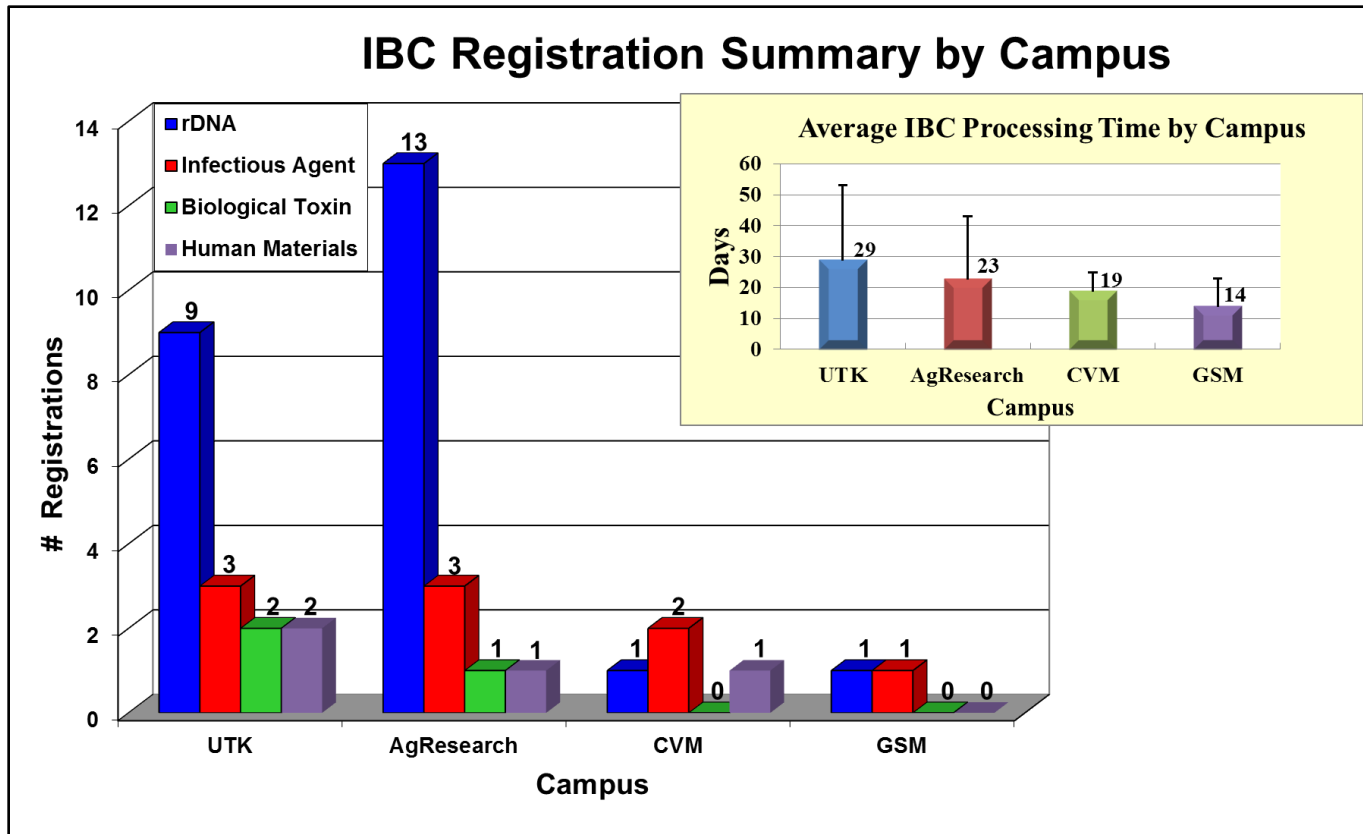


Figure 1: 2012 IBC Registrations & Processing Time by Campus

Biosafety Training

Figure 2 highlights the number of individuals trained in various biosafety and/or research compliance subjects during 2012. 117 in-person training sessions were conducted during 2012. Additionally, online refresher training modules were offered in standard microbiological practices (SMPs, labeled as

'Biosafety Awareness'), Biosafety Level-2 practices, the (T)OSHA Bloodborne Pathogens Standard, or biological materials shipping regulations. The total number of trainees (in-class and online formats) is indicated for each category. In total, nearly 1,400 individuals received either initial or annual refresher training.

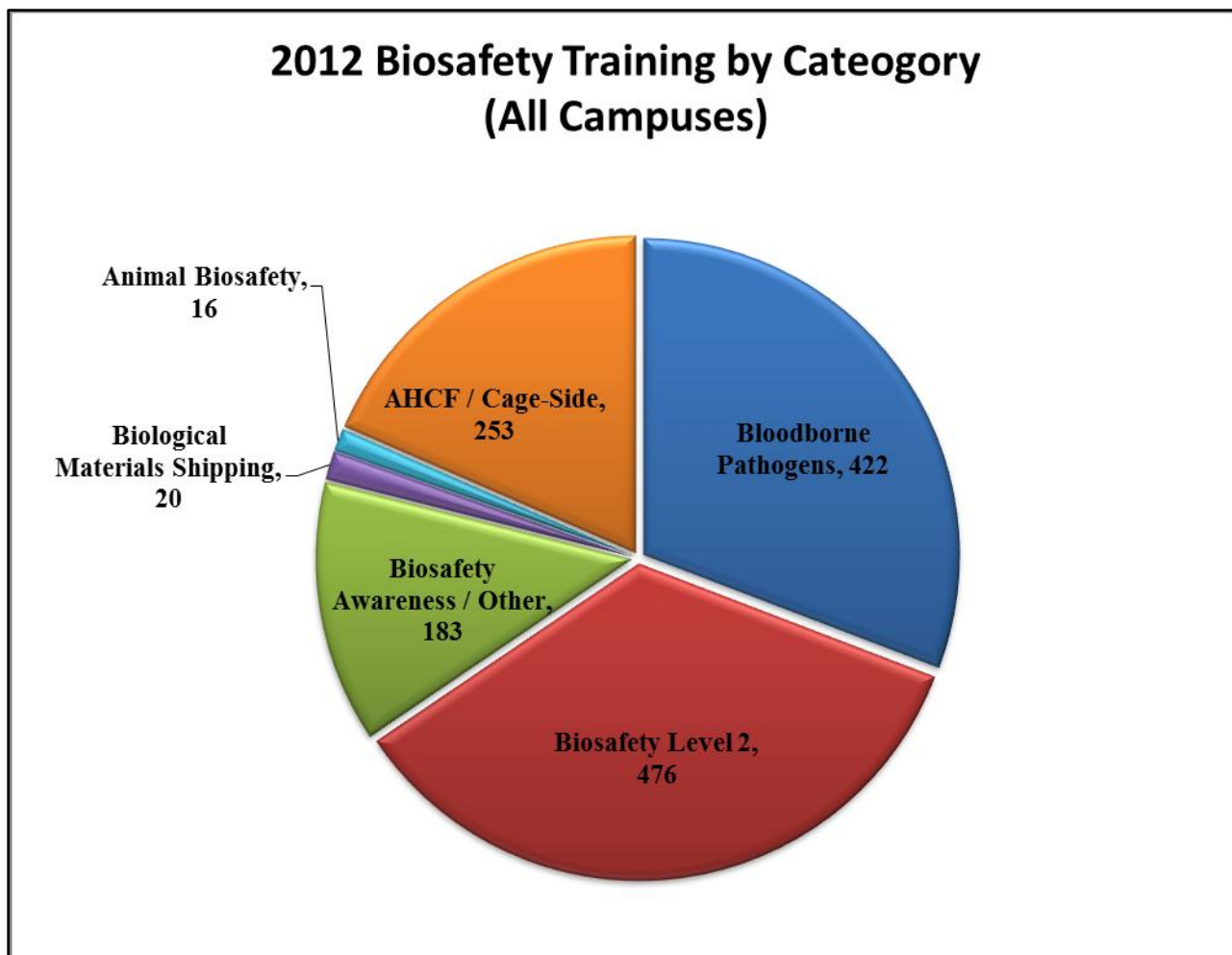


Figure 2: 2012 Biological Safety & Compliance Training by Category (All Campuses)

Other Biosafety-Related Services

Other safety and compliance services provided by the IBC/Biosafety Office are shown in Figure 3. Major efforts included:

- Processing annual updates for all active IBC/Biosafety registrations (83 total; in addition to 40 processed for IBC review as described above);
- Conducting annual BSL-1 and semiannual BSL-2 lab inspections (137 total);
- Hazard assessment and completion of Animal Hazard Control Forms for Institutional Animal Care & Use Committee (IACUC) protocols involving hazardous agents (287 protocols reviewed);
- Coordination of quarterly autoclave validations to ensure proper treatment/inactivation conditions for bagged biohazardous waste (119 total validations conducted).

Biosafety Compliance Statistics - Miscellaneous

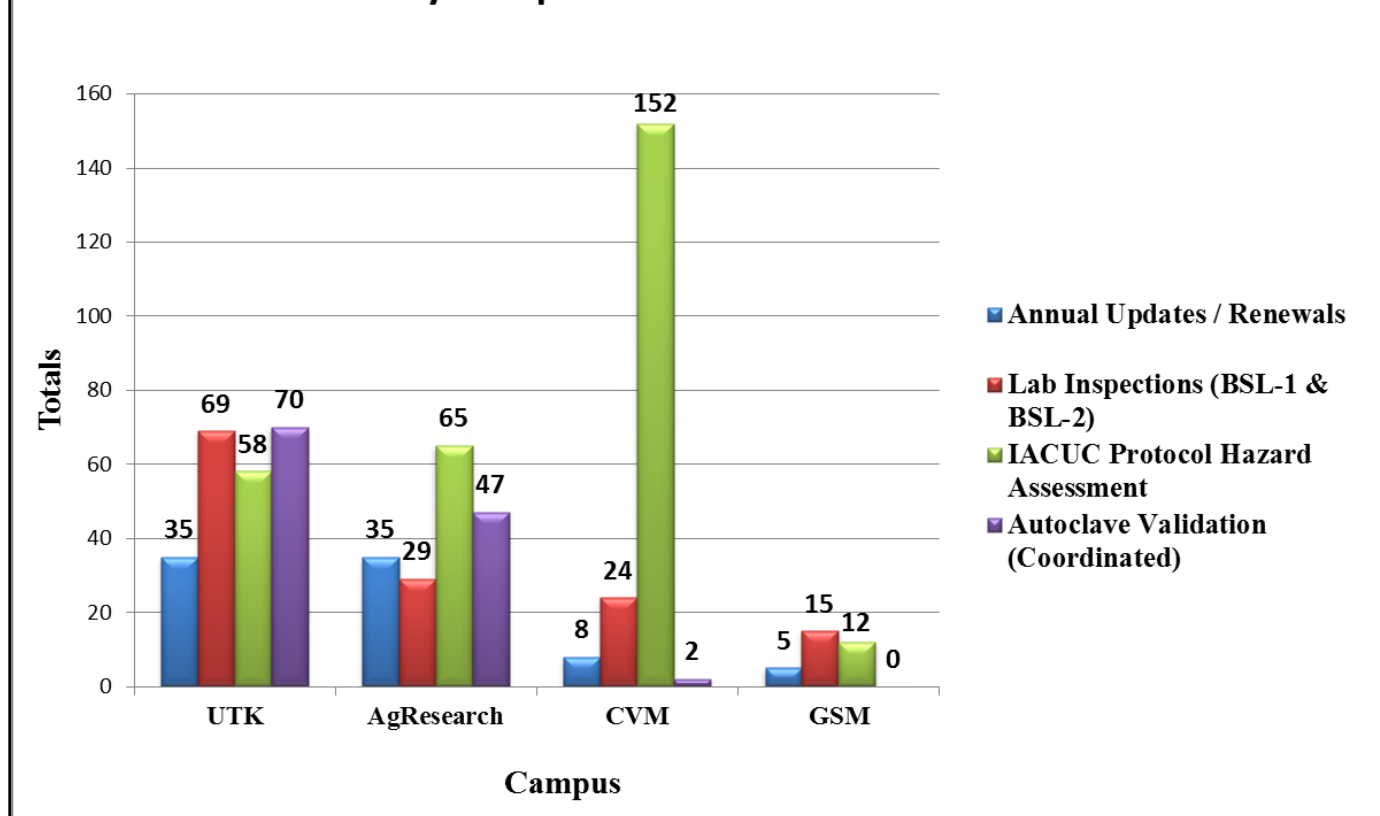


Figure 3: 2012 Additional Biological Safety/Compliance Services by Campus

2012 IBC Activity Highlights:

- Dr. John Sanseverino stepped down as Chair and rotated off the IBC. Dr. Chunlei Su assumed the Chair, and Dr. Jun Lin was appointed as Vice-Chair.
- Dr. Jae Park (Biochemistry, Cellular & Molecular Biology), Dr. Seung Baek (Biomedical & Diagnostic Sciences), Dr. Melissa Kennedy (Biomedical & Diagnostic Sciences) joined the committee.
- A new interactive registration form inclusive of all purview areas was adopted and implemented.
- A "User's Guide" for the new registration form was adopted and implemented.
- The IBC website was migrated to a SharePoint format and implemented.
- The committee reviewed/commented on a proposed policy covering minors in laboratories and shops (in process).
- Reviewed/approved 40 registrations for the research use of recombinant DNA, infectious agents, human materials (administrative-Biosafety Office), or biological toxins (Figure 1).

Biosafety Office Activity Highlights:

- Dr. Jon Phipps replaced Sarah DiFurio as Biosafety Specialist in November, 2012.
- Provided training in some facet of biological safety & compliance for nearly 1,400 faculty, staff, or students (see above).
- Participated in 3 USDA APHIS facility/project inspections (1 Biotechnology Regulatory Services; 2 Veterinary Services).
- Performed ~140 lab inspections (see above).
- Delivered IBC/Biosafety compliance awareness through the UTIA Compliance Office 'lunch-and-learn session, Plant Sciences seminar, and Comparative/Experimental Medicine seminar.
- Worked with Facilities Services (Building Services) to develop and implement a new standard procedure for disposal of autoclave-treated biological waste to comply with TDEC regulations for processing/landfilling exempt special waste (fully implemented February, 2012).
- In collaboration with the departments of Environmental Health & Safety and Radiation Safety, provided "hands-on" safety awareness training for the UT Police Department by providing an interactive walkthrough of the Bass Building (Forensic Anthropology); provided Bloodborne Pathogens refresher to UTPD on behalf of Environmental Health/Safety (February, 2012).
- Prepared an informational "Biosafety Program" pamphlet to cover the basic functions and services of the IBC and Biosafety Office.
- Collaborated with Environmental Health/Safety, Radiological Safety, and other safety-related groups to hold 1st Annual Safety Expo (University Center, September, 2012).
- Worked with various safety groups, General Counsel, and the STEM Program to develop a policy applicable to minors working in laboratories and shops (in process).
- Developed additional electronic resources:
 - A new interactive registration form (electronic pdf) and accompanying "User's Guide";
 - A SharePoint site to serve as the new IBC website/registration repository;
 - A Biosafety listserv to assist with disseminating biosafety/safety-related information.
- Training and professional development:
 - Sarah DiFurio completed the *Principles and Practices of Biosafety* training course (Feb 26-March 3, 2012; San Diego, CA).
 - Brian Ranger participated in the UT/TBR System Safety Officers' meeting held at Paris Landing State Park (Buchanan, TN) in May, 2012. He also attended the UT-specific meeting in November, 2012 (UT Space Institute; Tullahoma, TN).
 - Brian Ranger participated in the American Biological Safety Association (ABSA) Annual Conference (Orlando, FL) in October, 2012. Pre-conference training courses completed included: 1) *Infectious Substance Shipping Refresher*, and 2) *Biological Toxins and the Biosafety Professional*.
 - Brian Ranger volunteered to be a member of the Southeastern Biological Safety Association (SEBSA) working group to update the existing charter and recruit an updated membership.

Report prepared by: Brian Ranger, UTK/UTIA/GSM Biosafety Officer