

University of Tennessee- Knoxville 2011 INSTITUTIONAL BIOSAFETY COMMITTEE & BIOSAFETY OFFICE ACTIVITY SUMMARY

IBC Registration Review

The UT Institutional Biosafety Committee (IBC) conducted nine meetings during 2011. A total of 33 registrations (21 three-year renewals and 12 new projects) were reviewed/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, or biological toxin) and number processed by campus. Although variable by campus, the average processing time from submission to final approval averaged 31 days across all campuses (see Figure 1 inset). Additionally, there were 7 approved amendments and 17 administrative terminations (experiments concluded or faculty relocation/retirement).

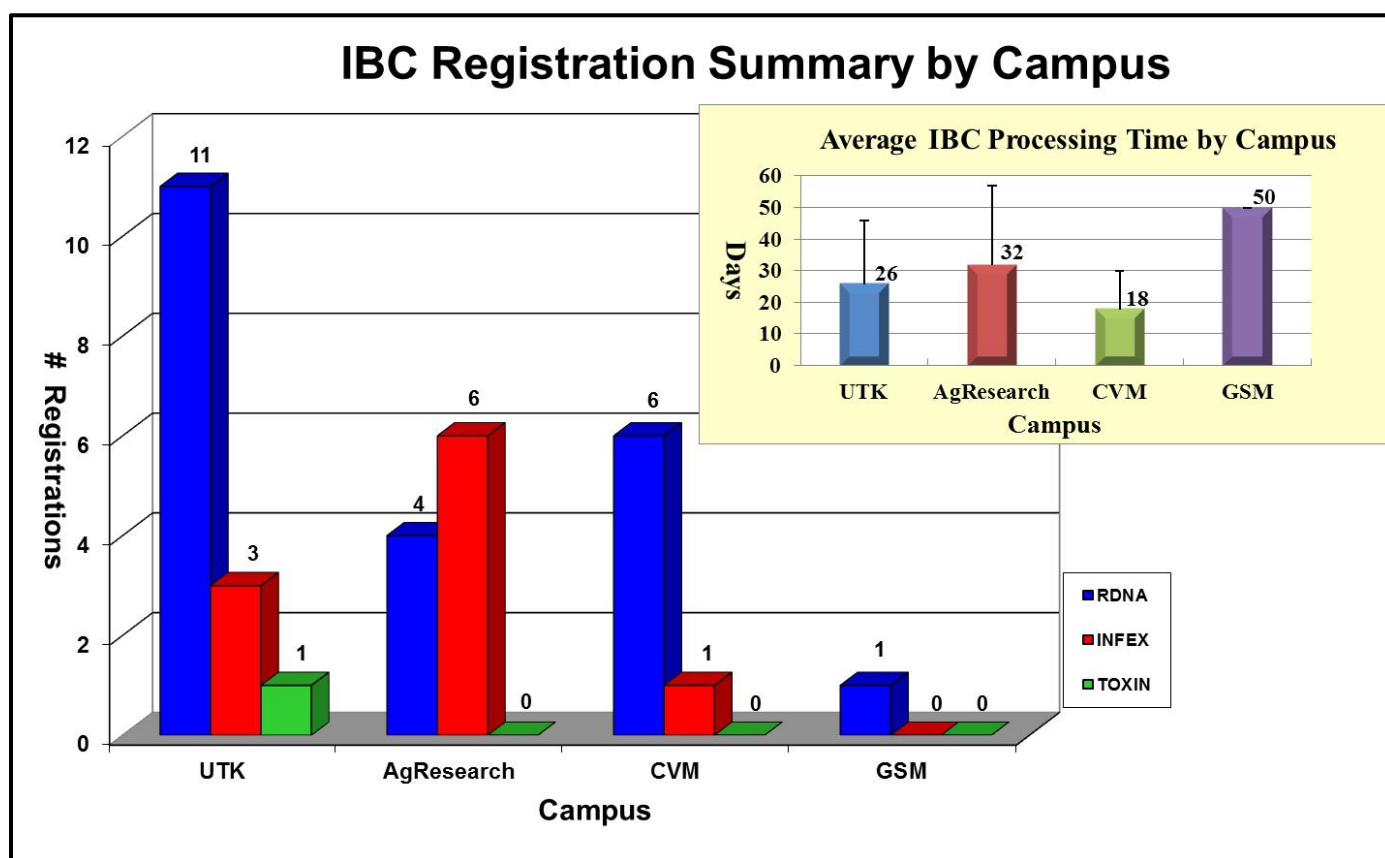


Figure 1: 2011 IBC Registrations & Processing Time by Campus

Biosafety Training

Figure 2 highlights the number of individuals trained in various biosafety and/or research compliance subjects during 2011. The total number of trainees (in-class and online formats) is indicated for each category. In total, over 1,200 individuals received either initial or annual refresher training related to standard microbiological practices (SMPs, labeled as 'Biosafety Awareness'), Biosafety Level-2 practices, the (T)OSHA Bloodborne Pathogens Standard, animal-related biosafety, or biological materials shipping regulations.

2011 Biosafety Training by Category (All Campuses)

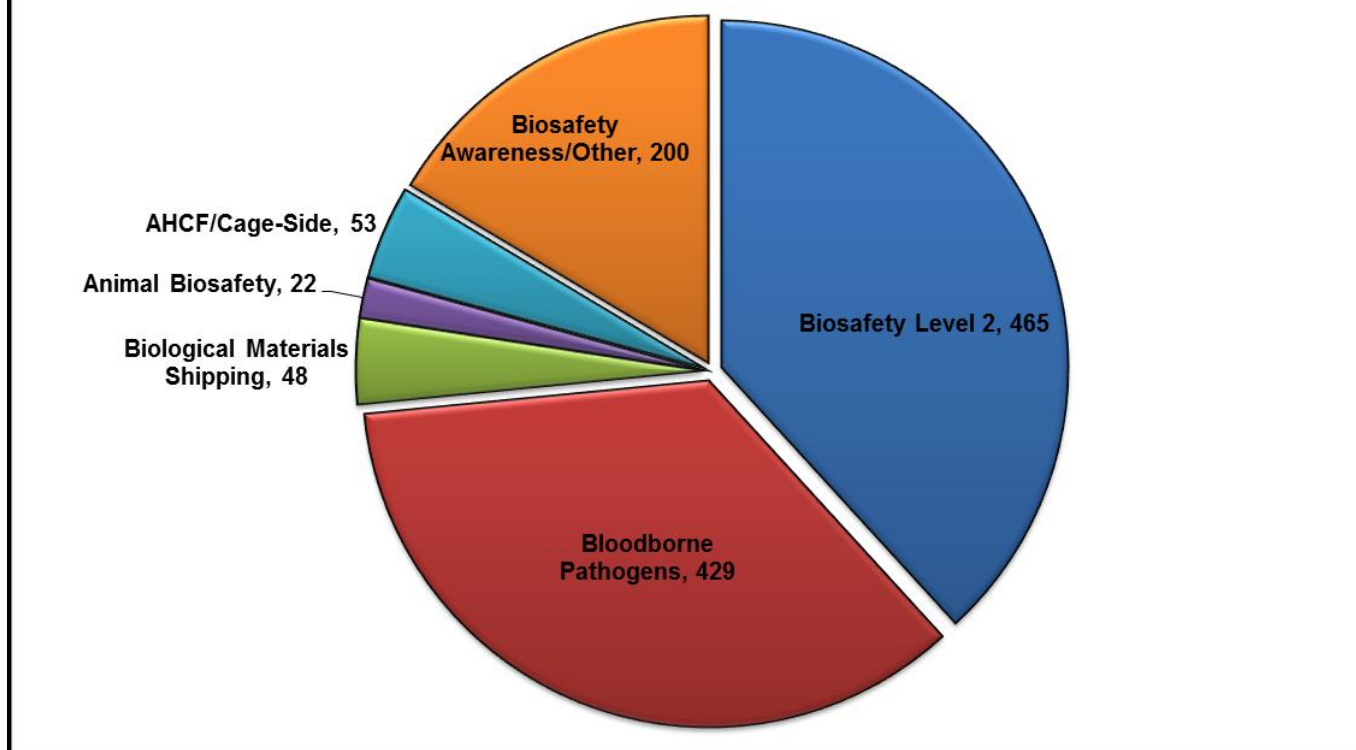


Figure 2: 2011 Biological Safety & Compliance Training by Category (All Campuses)

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 (65 total; in addition to 33 processed for IBC review as described above);
- Conducting annual BSL-1 and semiannual BSL-2 lab inspections (130 total);
- Hazard assessment and completion of Animal Hazard Control Forms for Institutional Animal Care & Use Committee (IACUC) protocols involving hazardous agents (119 protocols reviewed);
- Coordination of quarterly autoclave validations to ensure proper treatment/inactivation conditions for bagged biohazardous waste (124 total validations conducted).

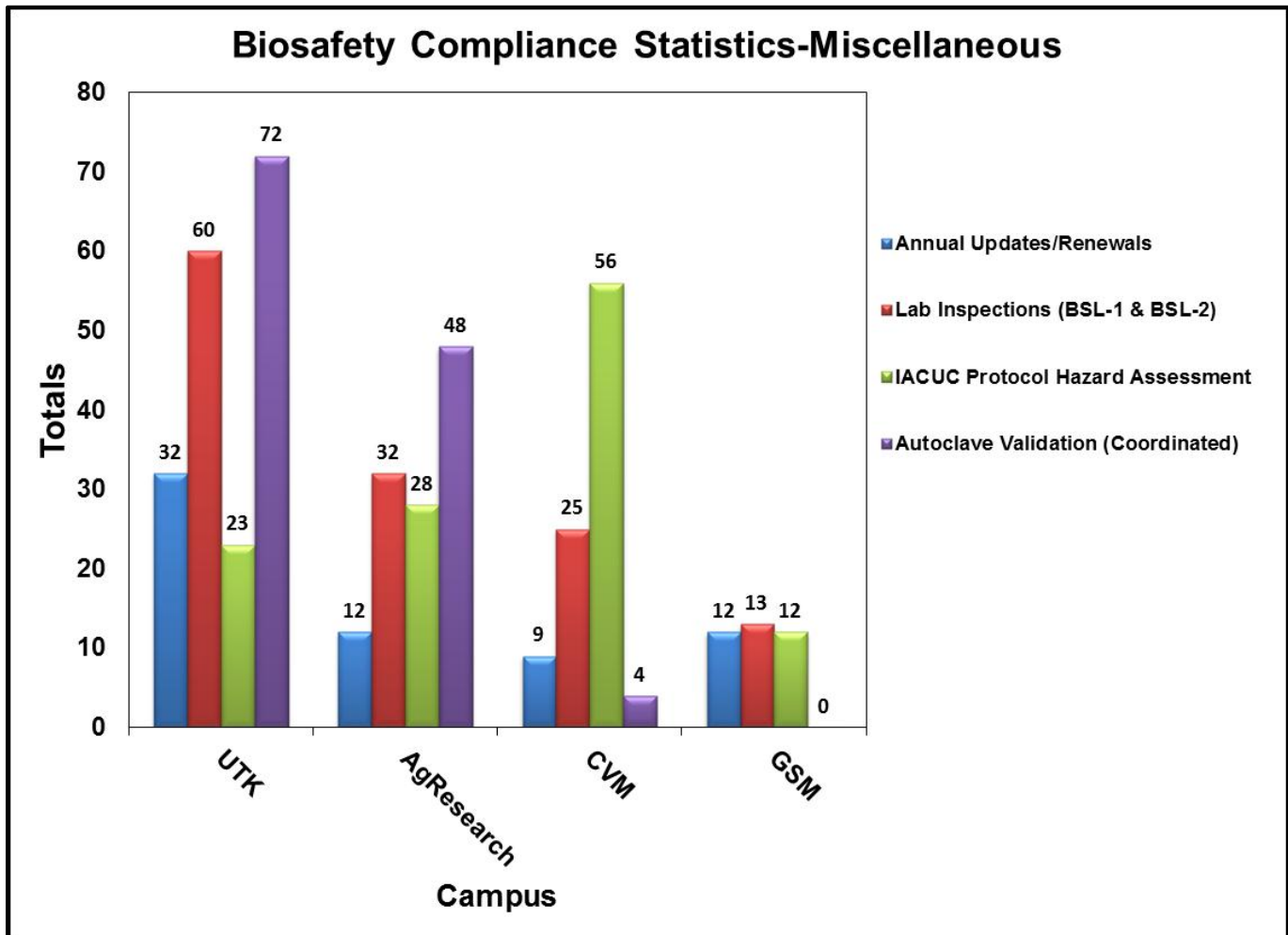


Figure 3: 2011 Additional Biological Safety/Compliance Services by Campus

2011 IBC Activity Highlights:

- Dr. Gina Pighetti stepped down as Chair and rotated off the IBC.
- Dr. John Sanseverino assumed the Chair (1-year interim appointment), and Dr. Chunlei Su was appointed as Vice-Chair.
- Dr. Paul Dalhaimer (Chemical/Biomolecular Engineering), Dr. Mariano Labrador (Biochemistry, Cellular, & Molecular Biology), Dr. Jun Lin (Animal Science), and Dr. Ling Zhao (Nutrition) joined the committee for 2 year appointments.
- The IBC officially implemented a revised version of the *Plant Containment Manual for Plant Studies Involving Recombinant DNA in the UTIA Greenhouse Facilities* (updated by the Biosafety Office in May, 2011).
- An updated version of the IBC Charter (Version 1.3.2) was adopted by the committee in December, 2011. The revision addressed Department Head responsibilities in the event of departed faculty (Section IV-E).
- Conducted IBC/Biosafety client satisfaction survey (launched November, 2011).
- Reviewed/approved 33 registrations for the research use of recombinant DNA, infectious agents, or biological toxins (Figure 1).

Biosafety Office Activity Highlights:

- Jessica Woofter replaced Lora Hartley as Administrative Support Assistant in September, 2011.
- Provided initial training in some facet of biological safety & compliance for over 1,200 faculty, staff, or students (see above).
- Participated in 4 USDA APHIS facility/project inspections (3 Biotechnology Regulatory Services; 1 Veterinary Services).
- Developed and implemented a new Pass/Fail lab inspection reporting process.
- Performed ~108 BSL-2 lab inspections.
- Developed a BSL-1 lab inspection checklist/procedure and conducted 22 BSL-1 inspections (Figure 3).
- Commissioned 4 new BSL-2 laboratories (including the new Forensic Anthropology Center processing lab at the new William Bass Bldg.); decommissioned 2 BSL-2 laboratories (faculty relocation).
- Delivered IBC/Biosafety compliance awareness to Offices of Research (UTK, UTIA, and CVM) Sponsored Programs personnel (June, 2011).
- 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.
- 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 Dabney-Buehler in May, 2011.
- Developed additional electronic resources for the research community:
 - Online refresher modules were developed and implemented (BlackBoard) for biological materials shipping (dry ice, exempt human/animal specimens, and UN3373, Biological Substance Category B) and regulated medical waste (UN3291) packaging/shipping.
 - Annual update forms were redeveloped as interactive pdf files to simplify electronic submission/completion.
 - A community SharePoint site was developed to serve as a Biosafety/IBC document repository to be shared with the research community (implementation pending).
- Training and professional development:
 - Brian Ranger participated in the UT/TBR System Safety Officers’ meeting held at Middle Tennessee State University (Murfreesboro, TN) in May, 2011. He also attended the UT-specific meeting in November-December, 2011 (Knoxville, TN).
 - Sarah DiFurio completed Department of Homeland Security Center for Domestic Preparedness Technical Emergency Response Training for CBRNE Incidents (Anniston, AL) in June, 2011.
 - Brian Ranger and Sarah DiFurio completed the Department of Agriculture-Center for Agriculture and Food Security and Preparedness Foreign Animal Emerging Diseases (FAED) course (Knoxville, TN) in August, 2011.
 - Sarah DiFurio was recognized as a Registered Biosafety Professional by the American Biological Safety Association (ABSA) in September, 2011.
 - Brian Ranger completed the OSHA Training Institute’s 40-hour course in General Industry Safety (Center for Industrial Services; Nashville, TN) in September, 2011.

- Brian Ranger and Sarah DiFurio attended the USDA APHIS/CDC Select Agents Program policy workshop in November, 2011 (Knoxville, TN).
- Jessica Woofter completed SharePoint I & II, Microsoft Access II, & IRIS Overview training during Fall, 2011 (Knoxville, TN).
- Sarah DiFurio is currently a member of the Educational Operations Committee, Scientific Program Committee, & Training Tools Committee for the American Biological Safety Association.

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