

ABSA

54th Annual Biological Safety Conference

Anaheim Marriott Hotel • Anaheim, California • October 27 - November 2, 2011

www.absaconference.org



PRELIMINARY PROGRAM

54th Annual Biological Safety Conference

Special Event—Dinner and Dancing

Surf's up at the Anaheim Marriott on Tuesday night, November 1, 2011. Come join fellow ABSA enthusiasts for a fun-filled night at the *beach*. Wear your most *awesome* beach gear, get some grub, *hang ten* on the surfboard rider, dance to the coolest DJ tunes, and immortalize the memories at the photo booth. Bring a piece of home with you to share and participate in our logo clothing exchange. It could be a hat, shirt, jacket, etc. that represents your school, employer, or hometown. California style dinner and 2 drink tickets will be provided. Come and chill with us!

Award Presentations

Monday at 9:30 am—Arnold G. Wedum Memorial Lecture Award

Monday at 2:30 pm—Eagleson Award and Lecture

Tuesday at 8:00 am—Griffin Foundation Award and Lecture

Wednesday at 10:20 am—Richard Knudsen Award

Wednesday at 11:10 am—Arnold G. Wedum Distinguished Achievement Award

Wednesday at 11:10 am—Everett J. Hanel, Jr. Presidential Award

Wednesday at 11:10 am—John H. Richardson Special Recognition Award

Registration

The Registration Desk will be open Thursday through Wednesday from 7:00 am - 5:00 pm.

New Member Reception

The reception for new members will be held Sunday from 5:30 - 6:30 pm.

Opening Reception

The Opening Reception will be held Sunday from 6:30 - 8:00 pm.

Hotel Information

Anaheim Marriott Hotel

700 West Convention Way

Anaheim, CA 92802

714-750-8000

Confirmed Rate: \$220.00 single

Cut-off Date: October 5, 2011

Exhibit Hall

The exhibit hall will be open on Sunday 6:30 - 8:00 pm for the Opening Reception. It will also be open on Monday and Tuesday for continental breakfasts, lunches, and breaks.

Preconference Courses

Please visit our web site for course availability.
www.ABSAconference.org

Thursday, October 27, 2011

8:00 am - 5:00 pm

1. **Doing What Works and Doing What Matters: Survival Skills for Today's Biosafety Professional**

LouAnn Burnett, CBSP, Sandia National Laboratories, Albuquerque, NM

Sean G. Kaufman, MPH, CHES, CPH, Emory University, Atlanta, GA

Regardless of a biosafety professional's technical expertise and years of experience, navigating a biosafety position in today's research and regulatory climate can be complicated and difficult. Instead of serving as partners and advocates to facilitate safe practices in critical biomedical and biotech research, most BSPs are often required, by organizational focus on compliance and liability and the sheer size and pace of the research enterprise, to spend most of their time addressing administrative requirements (inspections via checklist, documentation, and very limited training sessions, etc.). These administrative burdens reduce the time that BSPs have to collaborate and work closely with researchers to maintain and improve biosafety processes. Controls and practices that will minimize the risk of an unintentional release of a biological agent are often applied only as an extra layer, even an afterthought, within the culture of the lab. This "outside" element is often met within the lab with resistance and hostility and the perception of the BSP moves from that of advocate to adversary. Proper controls are often observed only for the benefit of the BSP and organization rather than being truly incorporated into the behavior of the lab personnel. Today's BSPs desperately need tools to help simplify and streamline the administrative tasks they are assigned so they can better focus on the true mission of biosafety: safety of researchers and containment of biological research. Serving as an advocate for a safe and contained research environment requires intentional strategies for communication and education that enhance both the ability to pursue cutting edge research **and** providing a culture in which to do it safely and securely.

Objectives:

- Administer a biosafety program gap analysis
- Identify and communicate with different personalities (using a Myers Brigg model)
- Discuss behavioral evolution
- Evaluate and validate Standard Operating Procedures
- Discuss communication strategies for behavioral motivation

Suggested Background: None

Target Audience: New and experienced biosafety professionals or those that supervise biosafety professionals

Audience Level: Intermediate/Advanced

8:00 am - 5:00 pm

2. **International Infectious Substance Shipping**

Eric Cook, MPH, CBSP, Sandia National Laboratories, Albuquerque, NM

This course will provide training for the proper classification, identification, marking and labeling, legal documentation, and packing and handling for Class 6.2—Infectious Substances and Class 9 (dry ice) in accordance with IATA/ICAO, 49 CFR, TDGR, and ADR/RID. It will also cover some chemical hazardous materials related to infectious substances shipping (methanol, ethanol, liquid nitrogen, formalin, etc.). The session will cover all of the information necessary for an attendee to renew or certify as a shipper of Class 6.2—Infectious Substances and Class 9 (dry ice) in accordance with IATA/ICAO and 49 CFR 172 Subpart H. Using actual UN specification packaging, each participant will take part in a hands-on exercise to correctly pack, mark, label, and document a "shipment" with assessment and critique from the trainer. Successful completion of the exam at the end will allow participants to become IATA and/or DOT certified infectious substance shippers. This course is appropriate for those who have some experience with infectious substance handling or shipping but may not have been certified within the past 3 years. The course utilizes several facilitated learning activities. Participants have opportunities to mark, label, packaging and complete documentation for a variety of infectious substances shipments (Category A, Category B, Exempt Patient Specimens). This is not just death by PowerPoint; there will be lots of hands on, interactive and facilitated learning opportunities, group discussions, and practical exercises. Participants must score at least 70% in order to be certified.

Objectives:

- Become familiar with regulations for infectious substance shipping with a focus on IATA Dangerous Goods Regulations
- Understand and apply the regulatory definitions for infectious substances (Category A, B, and exempt) to determine the proper classification
- Be able to properly package, mark, label and document shipments of all types of biological materials

Suggested Background: Infectious substance shipping training, experience, or knowledge

Target Audience: All safety professionals, laboratory workers

Audience Level: Basic/Intermediate

8:00 am - 5:00 pm

3. Implementing a Laboratory Biorisk Management System (2-Day Course)

Reynolds M. Salerno, PhD, Sandia National Laboratories, Albuquerque, NM

Susan Caskey, Sandia National Laboratories, Albuquerque, NM

Patricia Olinger, RBP, Emory University, Atlanta, GA

Biorisk Management is a comprehensive and performance based approach to address the needs of laboratories in establishing a safe and secure environment when working with biological materials. Based on the CWA 15793:2008, the implementation of a biorisk management system is not only desirable but necessary to move beyond the significant limitations of the classical biosafety program approach. This course will introduce specific management tools, like risk assessment, process mapping, gap analysis, auditing, SOP development, and overall program improvement strategies. Participants will learn how to use and customize some of these tools needed to establish and implement a successful biorisk management system in their laboratories. The course is based on a highly interactive structure, involving group and individual work, role play, and case studies as well as Q&A sessions.

Objectives:

- Explain the 3 components of a Biorisk Management System
- Ability to use the "Biosafety & Biosecurity Risk Assessment Methodology" (BioRam software)
- Develop and use customized process maps

Suggested Background: Involvement with or responsibility for the dispatch of infectious substances and/or clinical or biological samples by air

Target Audience: All safety professionals

Audience Level: Basic/Intermediate/Advanced

8:00 am - 5:00 pm

4. Animal Biosafety BSL-3 Facilities—Design to Operations for Small, Medium, and Large Animals

Barbara Fox Nellis, SM(NRCM), RBP, CBSP, Barb Nellis Consulting, Sarasota, FL

Kelly Flint, RBP, National Institutes of Health, Bethesda, MD

This course will cover operational issues for various types of animal level 3 facilities (small, medium, large, and arthropod); how design can impact operational efficiency and create issues, flow of materials (food, waste, carcasses), movement of animals and workers, clean vs. dirty, movement of water, waste (dry and liquid) and air, typical daily issues with small animals (rodents), medium size animals (dogs and/or cats), large animals (horses, cattle) and finally special needs of primates; laboratory management including training, SOPs, medical surveillance, emergency response, inspections, personnel reliability, biosecurity and examples of operational day-to-day problems/solutions. Case studies will complete this course. For Select Agents in animals the current checklists used by the CDC and USDA/APHIS will be reviewed with recommendations for compliance to these checklists.

Objectives:

- Recognize why risk assessment is a necessary first step in the design of ABSL-3 facilities
- Apply the tools to ask the right leading questions of the architects and engineers
- List many practical daily problems with recommended solutions typical of a functioning ABSL-3 facility
- Employ tools to participate on design and construction teams for ABSL-3 facilities

Suggested Background: Fundamentals of Biosafety

Target Audience: Biological safety professionals, safety and occupational health professionals

Audience Level: Intermediate

8:00 am - 5:00 pm

5. Process Biosafety

Brian Petuch, RBP, CBSP, Merck, West Point, PA

Shawn Bean, Merck, West Point, PA

Barbara Owen, RBP, Merck, Whitehouse Station, NJ

This course will review biosafety for work at large-scale, which the NIH rDNA Guidelines defines as >10L. The course will review application of Appendix K from GLSP to BSL-3 LS, with a focus on primary and secondary containment including the GMP environment. We will also review basic bioprocessing steps, such as fermentation/cell culture and purification technologies. Examples of classic and new technologies will be provided. Pearls and pitfalls of the various technologies will be discussed, using manufacturing scenarios. PPE considerations will be discussed. The course will include a review of hazard analysis techniques used to analyze large-scale processes.

Objectives:

- Understand how Appendix K of the NIH rDNA Guidelines is applied to large-scale bioprocessing
- Recognize various large-scale bioprocessing technologies, as well as the inherent risks they pose
- Gain awareness (but not formal training) of the various process hazard analysis techniques
- Case studies will consider various bioprocess scenarios and allow students to develop initial questions or plans regarding risk assessment

Suggested Background: Fundamentals of Biosafety, Risk Assessment

Target Audience: All safety professionals, new and experienced

Audience Level: Basic

8:00 am - 5:00 pm

6. Biosafety Instructor

Patricia Delarosa, PhD, RBP, CBSP, Booz Allen Hamilton, Middletown, DE

Betty Kupskay, MSc, RBP, University of Minnesota, Minneapolis, MN

Melina Kinsey, RBP, CBSP, MRI Global, Frederick, MD

Lolly Gardiner, RBP, CBSP, MRI Global, Boulder, CO

This is a do-it-yourself training course based on a procedural approach that integrates laboratory and biosafety procedures. Using interactive materials, this course will guide participants to analyze and design a facility-specific biosafety training program. Classroom materials are targeted to a BSL-2 clinical surveillance laboratory, but the template-style materials design allows for adaptation to your facility or institute. Training analysis, training design, competency training, and proficiency testing are covered in the course. Practical classroom materials are used to demonstrate how to link classroom training to working procedures and practices in the laboratory. This class was originally designed as a training course for international biosafety officers, but can be easily adapted to U.S. audiences. International participants are welcome. Training Segments: 1) Root Cause Analysis—Defining the training focus audience and training needs; 2) Training Design—What type of training program do you need? 3) Conducting a Training Analysis: a) procedural risk analysis; b) primary and enabling SOPs; c) Task List Adaptation to Biosafety; 4) Designing Facility-specific Training: a) biosafety cabinet training; b) spill response; 5) Competency Training the Laboratory Trainer: a) training drills for laboratory personnel; b) instructor checklists; 6) Training Evaluation and Proficiency Training; and 7) Novel Training Designs.

Objectives:

- Apply the risk assessment in all biosafety training
- Design a competency training program in biosafety for their facility
- Design proficiency tests that test biosafety knowledge, skills, and ability
- Conduct a training analysis and focus training on individual and facility needs

Suggested Background: Fundamentals of Biosafety, Risk Assessment, Micro/Molecular Biology 101

Target Audience: Laboratory workers, all biosafety professionals

Audience Level: Basic/Intermediate

8:00 am - 5:00 pm

7. Introduction to Biological Risk Assessment

Betsy Weirich, CBSP, Centers for Disease Control and Prevention, Atlanta, GA

Patrick Condreay, PhD, GlaxoSmithKline, Research Triangle Park, NC

Sophie Brocard, PhD, RBP, University of Texas Medical Branch, Galveston, TX

Becky Langer, Bayer CropScience North America, Morrisville, NC

Rapid scientific and technological advances continue to challenge the biosafety community in determining and establishing the appropriate practices and containment necessary to avoid exposure to the wide array of hazardous biological agents and materials found in the laboratory today. This full-day introductory course will provide an opportunity to incorporate the basic knowledge and skills necessary in order to perform risk assessments for working safely with pathogens (human, animal, or plant); and rDNA (genetically modified organisms or viral vectors). Using case studies, participants will work together in groups to conduct risk assessments by determining the hazards involved; the appropriate questions to ask to address the potential risks associated with the intended activities; and then make recommendations on appropriate containment and practices required in order to work safely. Finally, the conclusions of the groups will be presented. Please note that participants are expected to have a basic knowledge of microbiology and biosafety (containment facilities and practices).

Objectives:

- Describe the basic concepts of laboratory biological risk assessments
- Identify and list determinants for assessing risk (host, environment, agent)
- Complete the steps of a risk assessment. Determine steps to manage risk (mitigation)
- Identify resources and references for risk assessment/management

Suggested Background: Fundamentals of Biosafety

Target Audience: New biosafety professionals

Audience Level: Basic

8:00 am - 5:00 pm

8. Infectious Substance Shipping: Train the Trainer

Eric Cook, MPH, CBSP, Sandia National Laboratories, Albuquerque, NM

Go beyond just learning the infectious substance shipping regulations, learn how to develop a sustainable, comprehensive infectious substance shipping program at your facility. Discover techniques to assess program management and training needs at your facilities and the steps to create a comprehensive and regulatory compliant shipping program. Learn how to prepare for a FAA hazardous materials inspection. Get the tools: power point presentation templates, scenario cards, training kit materials, and instructions on how to use them to become a master trainer in IATA-based infectious substance shipping. Learn how to incorporate facilitated learning activities to make your shipping courses come alive. This is not an infectious substance shipping certification course. Participants in this course are expected to already be knowledgeable of infectious substance shipping regulations and have completed a certification course with in the past 3 years.

Objectives:

- To create an interactive, facilitated infectious substance shipping training program
- Be able to teach others the regulatory definitions for infectious substances (Category A, B, and exempt) to determine the proper classification
- Manage a shipping program to properly package, mark, label, and document shipments of all types of biological materials
- Train others to be certified according to U.S. national and international shipping regulatory requirements to ship infectious substances, Class 6.2 and dry ice

Suggested Background: None

Target Audience: Experienced biosafety professionals

Audience Level: Advanced

8:00 am - 5:00 pm

9. BSL-3 Operations and Maintenance

Dee Zimmerman, University of Texas Medical Branch, Galveston, TX

Paul Jennette, RBP, Cornell College of Veterinary Medicine, Ithaca, NY

This full-day course will review the important aspects of the daily operation of a BSL-3 facility from 2 points of view; management of the facility and daily operations. This assumes that you already have a facility built and have all required authorizations to work in it. This course will cover all the different aspects you need to consider to operate a BSL-3 facility such as approval of worker, training of workers and maintenance support, occupational health issues,

managing waste, maintenance of the HVAC and physical facility, periodic checks on the facility's systems, and emergencies of different types. It will also cover daily operations in a BSL-3 such as understanding when it is safe to enter and when you need to evacuate the facility, what to-do when the ventilation fails, practical aspects of entry and exit procedures, practical tips on selection and use of PPE, safety considerations within the experimental SOPs, waste handling, facility's cleaning, and how to have equipment repaired or serviced. The class will be conducted in such a way that allow for interaction and exchange of experiences between participants and instructors. This course will not cover regulatory aspects from specific countries. The course assumes a basic understanding of risk assessment and biosafety principles.

Objectives:

- Identify elements of a BSL-3 program and methods of program evaluation
- Recognize institutional responsibilities from management to user
- Describe methods to develop manuals, SOPs, and training
- Describe elements of annual verification, emergency response, etc.

Suggested Background: None

Target Audience: All biosafety professionals

Audience Level: Basic

8:00 am - 12:00 pm

10. Fundamentals of Microbiology and Infectious Disease

James W. Klenner, MSc, MPH, MPA, RBP, CBSP, Indiana University-Purdue University Indianapolis, Indianapolis, IN

Intended for those professionals that participate in protocol review, facilities planning, and any other risk assessment activities, but are unsure as to the actual nature of the disease risks of microbiological agents. Biological safety and risk assessment will **not** be covered in this course. The proposed topics will cover infectious agents, virulence factors, pathogenicities, host-microbe interactions, susceptibility, modes of transmission, and the changes seen in the microbial world. If you don't know the difference between a TCID50, PFU, or ID50; or why HBV is stable in dried blood and HIV isn't; or why influenza is an inhalation hazard; or why public health officials advocate flu shots each year, then this class is for you.

Objectives:

- Defining different microorganisms and their pathogenicity
- Understanding the various modes of transmission of microbial pathogens
- Correlating the host response to microbial infections
- Developing a basis for various environmental survival trends

Suggested Background: None

Target Audience: All safety professionals, laboratory workers, animal caregivers

Audience Level: Basic

1:00 - 5:00 pm

11. Molecular Biology 101

James W. Klenner, MSc, MPH, MPA, RBP, CBSP, Indiana University-Purdue University Indianapolis, Indianapolis, IN

Intended for those professionals that participate in protocol review, facilities planning, and any other risk assessment activities, but lack a basic understanding of molecular biology and techniques. Success will be demonstrated when attendees are able to do more than regurgitate facts and use the new understanding of the principles of molecular biology in various situations at their occupation. We will cover topics such as the chemistry of nucleic acids, DNA replication, RNA transcription and protein translation (i.e., The Central Dogma of Biology, DNA cloning, transfection of prokaryotic and eukaryotic cells, restriction enzymes, and recombinant DNA lab methodologies [including PCR, DNA fingerprinting, sequencing, and detection protocols]). While this course will not turn you into a molecular biologist, it will provide enough background information to understand the nature and manipulation of genetic material and hopefully unveil the mystery of deoxyribonucleic acid.

Objectives:

- Understand the central dogma of molecular biology
- Identify the differences and chemistry of nucleic acids
- Recognize general molecular biology techniques
- Use the principles of molecular biology used to develop recombinant DNA technology and to show how these technologies are used to study biological phenomena

Suggested Background: None

Target Audience: All safety professionals, laboratory workers, animal caregivers

Audience Level: Basic

8:00 am - 5:00 pm

12. Engineering for the Biosafety Professional

Theodore J. Traum, PE, World BioHazTec Corp., Rio Rancho, NM

Proactive biosafety professionals need to be involved and knowledgeable in the operation, maintenance and certification of their containment facilities and building systems. Frequently, the biosafety professional is called upon to participate in the planning, design, and validation of a new biocontainment laboratory or renovation of an existing facility. The biosafety professional's training and experience is usually limited to the sciences and they often lack the knowledge of basic engineering principles. This course is intended to provide basic engineering principles that are useful in the planning, design, maintenance, and certification of containment facilities. The objective of this course is to equip the biosafety professional with the engineering tools to understand biocontainment planning, design, construction, maintenance, and operation activities. For the biosafety professional to participate in these activities, he/she needs basic knowledge and understanding, development of skills to ask questions in engineering terms and the confidence to question the answers. The course will provide information relevant to BSL-3 facilities for the determination of air change rates, interpretation of drawing schematics relating to containment supply and exhaust systems, an introduction in determining room heat loads and ventilation rates, concepts in directional airflow and room pressure differentials, ductwork distribution design and components, HEPA filtration, HVAC control issues, electrical power, lighting and signal systems. Building on this information, there will be a step-by-step presentation on planning a laboratory, its certification, maintenance and operation. At the course's conclusion, the participants should have the knowledge to better understand engineering issues in the design of biocontainment facilities, be able to formulate informed questions, understand the certification process, be able to interact with maintenance personnel and integrate facility operations with the biosafety program.

Objectives:

- Understand engineering issues in the design of biocontainment facilities
- Formulate informed questions in engineering terms and have the confidence to question the answers
- Understand the certification process
- Better interaction with maintenance personnel and integrate facility operations with the biosafety program

Suggested Background: None

Target Audience: All safety professionals, laboratory workers

Audience Level: Basic

Saturday, October 29, 2011

8:00 am - 5:00 pm

13. Biosafety Management Techniques for Improving Organization Program Understanding and Support

Robert Emery, DrPH, RBP, CBSP, University of Texas Health Science Center, Houston, TX

Rachel Gamble, CBSP, University of Texas Health Science Center, Houston, TX

A recurrent challenge for biosafety professionals is the garnering of necessary program resources. This task is difficult because on a good day in the world of biosafety nothing happens, so upper management may not fully appreciate or understand all of the effort that went into making nothing happen. Biosafety professionals in particular experience difficulty in this regard because many in the profession have received intensive training in the biological sciences, but little or no training in the area of program management. This course will focus on some key management techniques that can be used within biosafety programs to help improve stakeholder understanding of the program and its activities, which in turn can result in the provision of necessary programmatic resources. Numerous real world examples of successful applications of the techniques discussed will be displayed for review and discussion. Ample time will be provided throughout the course for participant inquiries.

Objectives:

- Identify various biosafety programmatic measures and metrics that can be easily captured and communicated
- Describe how biosafety programs can assist with other basic safety program needs to help avoid the notion of program duplication of efforts and to improve client satisfaction levels
- Employ various commonly used sales methods to improve the visibility and support for their biosafety programs
- Understand the basics of communications and how the techniques can be used to communicate biosafety risks effectively

Suggested Background: None

Target Audience: All safety professionals

Audience Level: Intermediate

8:00 am - 5:00 pm

14. Basic Virology and Virus-Based Gene Vectors

Patrick Condreay, PhD, GlaxoSmithKline, Research Triangle Park, NC

The first section of this course will introduce some concepts of gene expression and review basic virology with a focus on characteristics of viral families, viral replication strategies, pathogenesis and persistence, and anti-viral intervention. The second section will examine gene expression technology and principles of viral vector use before exploring characteristics of viral systems that are commonly used as gene delivery vectors in biomedical research. The material is targeted for the biosafety professional who does not actively conduct laboratory research, yet wishes to acquire a basic knowledge of virology and recombinant viral vectors.

Objectives:

- Be familiar with the molecules, and understand the basic processes involved in recombinant gene expression
- Understand basic concepts of virology
- Identify the characteristics of viral systems that are used as gene delivery vehicles
- Apply the knowledge of basic virology and characteristics of viral vector systems to risk assessment of recombinant viruses and protocols involving them

Suggested Background: Microbiology/Molecular Biology 101

Target Audience: All safety professionals

Audience Level: Intermediate

8:00 am - 5:00 pm

15. The Art and Science of Biocontainment Facility Design, Construction, and Operation

Robert Heckert, DVM, PhD, CBSP, Robert Heckert Consulting, Bowie, MD

Randy Kray, AIA, Merrick & Company, Atlanta, GA

Paul E. Langevin, PEng, Kanata, Ontario, Canada

This course will provide those involved in any aspect of biocontainment facility (BSL-2/3, ABSL-2/3) construction (new or renovation) the fundamental steps involved. The course will cover all aspects from planning to commissioning to provide the student a firm grounding in how a biocontainment facility is logically designed and built. The course will review the basic steps involved in planning, design, construction, acceptance, and operation that each facility should go through to be effective in primary and secondary containment. All of the instructors have had multiple experiences working with various types of facilities and will provide real-world examples of what and what not to do.

Objectives:

- Understand the important step-wise process in establishing and using a biocontainment facility
- Learn the steps involved and their sequence to ensure greatest success in establishing a biocontainment facility
- Learn that each step/phase has multiple parts and that each needs to be addressed before proceeding
- Using examples, identify difficulties/errors that can occur when the process is not followed in a step-wise manner

Suggested Background: Fundamentals of Biosafety, Principles & Practices of Biosafety

Target Audience: All safety professionals

Audience Level: Advanced

8:00 am - 5:00 pm

16. Developing Containment Laboratory Exercises and Drills—CANCELLED

Alexis Brubaker, (SM)NRCM, Boston University, Boston, MA

This class will allow the participants to work together in teams to develop and evaluate the effectiveness of 3 types of hands-on trainings: pop quiz drills, tabletop exercises, and full-scale exercises. The types of trainings will be discussed and participants will be put in groups to develop their exercises.

Objectives:

- Describe and discuss various types of exercises and drills
- Discuss the intent of regulatory requirements as they relate to exercises and drills
- Explain effective adult training techniques as they pertain to laboratory training
- Develop, present, and critique 3 scenarios, 1 representing each type of training

Suggested Background: Fundamentals of Biosafety, Risk Assessment, BSL-3 Design and Operations

Target Audience: All safety professionals, laboratory workers

Audience Level: Intermediate

8:00 am - 12:00 pm

17. NIH rDNA Guidelines—Case Analysis and Discussion

Claudia Gentry Weeks, PhD, CBSP, Colorado State University, Fort Collins, CO

Students will evaluate case studies that represent a broad-range of research situations, including rDNA research in BSL-2 and BSL-3 laboratories, research with plants in greenhouses and field studies, transgenic animals, viral vectors for gene therapy, and rDNA in clinical and veterinary research. Case studies will be based on real-life research situations. As this is an intermediate to advanced course, students should have basic knowledge of recombinant DNA, bacteriology, virology, and viral vectors used for rDNA research. The majority of the course will be spent on reviewing and discussing case studies. Students will work in groups and will determine whether or not the experiments presented in each case are exempt from the guidelines. They will identify relevant sections of the DNA guidelines and determine the appropriate approvals and biosafety levels required for performing the experiments. Special precautions required for each case will be discussed. Students will present results of their analyses and a group discussion will solidify the students' knowledge of the subject matter. Students will leave the course with a summary statement for each of the case studies and a flow chart for determining required approvals and the appropriate biosafety levels.

Objectives:

- Determine whether or not an experiment is exempt from the rDNA guidelines
- Identify the section(s) of the rDNA guidelines that are relevant to the research proposal
- List the entities that must approve the research proposal
- Recognize the biosafety level required for the research and any necessary special precautions

Suggested Background: Fundamentals of Biosafety, Risk Assessment

Target Audience: Experienced biosafety professionals

Audience Level: Intermediate/Advanced

1:00 - 5:00 pm

18. Audits and Inspections: A Quality Management Systems Approach

Patricia Olinger, RBP, Emory University, Atlanta, GA

Sean G. Kaufman, MPH, CHES, CPH, Rollins School of Public Health, Emory University, Atlanta, GA

Is your auditing or inspecting program just checking boxes? Transform your audit/inspection program! This course will introduce ideas and concepts of how to transform your audit/inspection program to assist you in capturing needed measures and metrics to use as part of your risk assessment program and to develop a positive safety culture. This course will explore strategies for implementation, how audit/inspection programs fit into an overall quality management system, and utilization of data gathering technologies.

Objectives:

- Understand how an internal audit/inspection program can be utilized for more than just checking boxes
- Know the different types of audit/inspection programs
- Recognize the audit/inspection program role in Biorisk Management Systems

Suggested Background: None

Target Audience: All safety professionals, laboratory workers

Audience Level: Basic/Intermediate/Advanced

8:00 am - 5:00 pm

19. Aerobiology in Infectious Disease Research: Fundamental and Applied Concepts

Chad Roy, PhD, Tulane University, New Orleans, LA

This course is intended to introduce the fundamental concepts of aerobiology and applications in infectious disease research. The major scientific tools and laboratory procedures associated with this activity will be presented didactically. Discussions will include the integration of animal exposure in the context of biomedical research and the implications for working safely in high containment environments. Introduction of these specialized techniques and the use of major engineering controls used in this type of research (Class III biological safety cabinet) in conjunction with many of the common inhalation configurations will be used as teaching aids. By using a mock performance of aerosol characterization, experimental infection will be demonstrated—allowing the opportunity for participants to interact with the instructor and the respective equipment. The overarching goal of the course is to leave the participants with an appreciation and general working knowledge of the major components and associated laboratory technique in facilities engaged in infectious disease research which also house the capability to perform studies that also incorporate aerobiology.

Objectives:

- Identify some of the major scientific tools and associated engineering controls used in this type of research
- Conceptual understanding of the nature of laboratory-generated aerosols containing highly infectious agents and consequences
- Requirements for operational safety and health in work environments that include this type of functional capacity
- Understanding the health and safety implications of integration of live animal experimental exposures with infectious aerosols under high containment

Suggested Background: Basic knowledge of biocontainment

Target Audience: All safety professionals, laboratory workers, animal caregivers

Audience Level: Basic/Intermediate

8:00 am - 5:00 pm

20. Waste Water Management for Unique Laboratory Applications

Becky Langer, PhD, Bayer Crop Science, Morrisville, NC

Chris Kiley, PE, Merrick, Duluth, GA

Gilles Tremblay, CET, Merrick, Atlanta, GA

Tru Twedt, DVM, CBSP, Merial Limited, Duluth, GA

Bruce Whitney, PhD, Texas A&M University, College Station, TX

Miguel Grimaldo, MA, University of Texas Medical Branch, Galveston, TX

This course was previously offered as a 4-hour course, focusing only on waste water from high containment facilities. For 2011, the course has been expanded in time and instructor expertise to allow further focus on critical aspects of waste water (wH₂O) management from other unique lab applications, in addition to high containment facilities. Unique lab situations may include, but are not limited to: greenhouses, fish hatcheries, tissue digesters, and pharmaceutical labs. The course will begin by presenting rationale for when effluent decontamination (ED) may be necessary. Once determined that ED is necessary, numerous items should be taken into account when considering options for managing the wH₂O. Instructors will lead participants through questions that need to be asked for wH₂O risk assessment and help them determine what federal, state, and local regulatory agencies will be looking for to assure that ED is successful. wH₂O management options will vary greatly depending on the composition of the effluent to be treated. The instructors will provide an in depth overview of the types of treatment options available, which can vary widely from simple to complex applications. With a complete understanding of wH₂O risk assessment and the available options for management, participants will learn how to identify design, operation, and maintenance issues in both the facility and the treatment system that may affect the ability to effectively manage the wH₂O treatment. Once a wH₂O management system is chosen, it is critical that the system be commissioned and validated to assure proper treatment of the wH₂O. Participants will gain an understanding as to which system components are critically examined during a commissioning process and how frequently the components should be re-verified. Many factors can cause treatment system failure, even if the unit is operating to manufacturers specifications and commissioning is successfully completed. The final step in implementing any wH₂O management system is to validate that any pathogens expected to be present are successfully inactivated by the system parameters that have been implemented. Instructors will present true case studies, allowing participants to experience real problems that have been identified and the lessons learned. Participants will conclude the day by applying their newly-acquired knowledge in a group project that focuses on identifying, developing, and maintaining the correct ED system for various applications.

Objectives:

- Determine when wH₂O management is necessary and what is necessary to meet regulatory requirements
- Perform wH₂O risk assessments and identify management options for waste water
- Recognize how design issues affect wH₂O management options
- Understand commissioning and validation procedures for wH₂O systems

Suggested Background: None

Target Audience: All safety professionals

Audience Level: Basic

8:00 am - 12:00 pm

21. Business Continuity & Emergency Preparedness for Academic, Medical, Governmental, and Pharmaceutical Organizations—CANCELLED

Daniel Liberman, PhD, Sharon, MA

Business continuity may be defined as the strategic and tactical capability of an organization to plan for, and respond to, a variety of incidents or business disruptions in order to continue business operations at acceptable predefined levels. The course will address business continuity and emergency management practices as essential components in the process of anticipating incidents, which can affect critical functions and processes that support the delivery of key services and operations for an organization. The course will provide attendees sufficient background information to respond to any incident in a planned and rehearsed manner that will safeguard the interests of employees, management, neighbors, key stakeholders, and the reputation of the organization.

Objectives:

- Provide sufficient background information, templates, and other tools necessary to develop plans that will allow business operations to continue during an emergency ensuring a quick, safe, and coordinated response
- Identify and implement measures to minimize the consequences of an incident and rectify any damage sustained via a simple, time-sensitive structure with predefined roles and responsibilities
- Provide a defined system for internal reporting and decision-making by providing fast access to specialist and technical support
- Ensure optimum cooperation with authorities, media, and public

Suggested Background: Risk Assessment

Target Audience: All safety professionals

Audience Level: Basic/Intermediate/Advanced

1:00 - 5:00 pm

22. Environmental Biotoxins

Jyl Burgener, RBP, CBSP, Talecris Biotherapeutics Inc., Clayton, NC

The purpose of this course is to acquaint the student with biotoxins that occur naturally in the environment and can have human health effects. The course will review global events, current and emerging research, and recognized case studies. Course outline: 1) what are biotoxins? a) definition; b) characteristics; c) examples; 2) why are biotoxins important? a) historical perspective; b) global disbursement; c) potential use and misuse; 3) regulatory considerations: a) Select Agent Rule; b) non-regulated; 4) case studies; 5) current and emerging research.

Objectives:

- Understand the definition and general characteristics of environmental biotoxins
- Recognize common biotoxins and their potential human health effects
- Become acquainted with case studies involving environmental biotoxins
- Increase awareness of current and emerging research of environmental biotoxins

Suggested Background: None

Target Audience: All safety professionals

Audience Level: Intermediate

Sunday, October 30, 2011

8:00 am - 12:00 pm

23. Working Safely in a Biosafety Cabinet

Felix K. Gmuender, RBP, Basler & Hofmann Singapore Pte Ltd., Singapore

The biosafety cabinet (class II) is the most important and most widely used primary barrier in the microbiological and biomedical laboratory (BSL-2, BSL-3, and BSL-4). Biosafety cabinets protect against aerosol exposure and to a lesser degree against small droplets. The protection of the operator depends on the selection of appropriate types and size of the cabinet, proper function, correct placement of the cabinet in the laboratory, and how the actual work in the cabinet is organized and carried-out. Biosafety cabinets need appropriate maintenance and annual certification. The user (or BSO) should be able to identify malfunctioning cabinets. The course starts with the technical background of the types of biosafety cabinets available on the market, and their strengths and limitations. Video demonstrations are used to illustrate airflow, scientific procedures with varying quality and perfection, as well as management of small spills. Participants work in groups to analyze and comment on the procedures shown and discuss improvements and alternatives.

Objectives:

- Understand different types of BSCs, laminar flow hoods and their applications, functions of BSC (video-supported) and what that means for organizing work
- Learn how to place and operate biosafety cabinets from the user's and BSO's perspective, simple performance tests, certification requirements (manufacturer and installation)
- Identify how to organize work in the cabinet (set-up through conclusion) and managing small and large spills
- Analyze, discuss, and improve several examples of procedures and workflows presented in video clips

Suggested Background: Fundamentals of Biosafety, Principles and Practices of Biosafety

Target Audience: All safety professionals, laboratory workers, new biosafety professionals

Audience Level: Intermediate

1:00 - 5:00 pm

24. The Physics Behind Biocontainment

Juan Osorio, National Institutes of Health, Bethesda, MD

Theodore J. Traum, PE, World BioHazTec Corp., Rio Rancho, NM

Diego Osorio, National Biosafety and Biocontainment Training Program, Bethesda, MD

Many principles in physics can be applied to the proper operation of a biocontainment laboratory. Concepts such as directional airflow, pressure, temperature, and humidity are needed to make a biocontainment facility run effectively and efficiently. Some biosafety professionals may not be aware that these concepts can impact their work and research. The objective of this course is to explain physics concepts using basic, real-life examples and ultimately relate these concepts to how they apply to biocontainment laboratories. Throughout the course, examples of basic physics concepts will be demonstrated to add a visual dimension that formulas and definitions cannot accomplish. Physics visual aids will be used to demonstrate actual engineering principles relating to biocontainment laboratories. A hands-on activity will be conducted following the explanation of each physics concept. This course will not be driven by formulas but will integrate examples that show cause and effect in real-life scenarios. Building on this information, there will be a step-by-step presentation on how these examples are relevant to planning a laboratory, validation, certification, maintenance, and operation.

Objectives:

- Understand how physics affects the planning, design, maintenance, operation, and certification of a biocontainment facility
- Apply physics concepts and formulas to control variables that impact daily work and eliminate disruption
- Interpret and understand data used for measuring pressure, temperature, humidity, and airflow
- Recognize how a building's system is affected by variables such as barometric pressure and temperature

Suggested Background: None

Target Audience: All safety professionals

Audience Level: Intermediate

8:00 am - 5:00 pm

25. Preparing for, Conducting, and Responding to Regulatory Agency Inspections/Audits

Barbara Fox Nellis, SM(NRCM), RBP, CBSP, Barb Nellis Consulting, Sarasota, FL

Christina Thompson, RBP, CBSP, Thompson Biosafety, LLC, Greenfield, IN

This course will prepare the biosafety and other safety professionals; the entity and laboratories for onsite regulatory inspections. The general outline consists of the following components: Background—what are the different regulators looking for and what do they want in advance of their visit, if it is announced; what to do with a surprise inspection depending upon inspection agency. How do the onsite audits vary and what is similar between CDC, USDA, DHS, DOD, DOT, FAA, NIH, DEA, and other regulatory agencies. Preparation—steps to take in preparing the facility, documentation and personnel as well as the management team for the onsite audit. Recommendations have been tested in numerous audits and have worked well. Why OSHA regulation compliance and training records are important. How to conduct yourself during the audit—what you can and should control and tips for training the visiting auditors if they expect to enter hazardous chemical, biological, or radiation areas. Worker interviews and stumbling blocks, training records and verification of training, individual training records for various work and containment environments. The opening and closing meetings—what should the auditors present and what should your facility present. The follow-up report—how to word this, presenting timelines for completion and thoughtful challenges to the auditor's finding. Case studies will be completed in a small group break-out, checklists used by the various regulatory agencies will be shared, and internal checklists for the facility created from templates to cover various types of facilities.

Objectives:

- Understand what agencies can and will inspect your entity
- Be prepared with the proper documentation and training
- Identify the follow-up that is required and the level of detail that is necessary

Suggested Background: Fundamentals of Biosafety

Target Audience: All safety professionals

Audience Level: Basic/Intermediate

8:00 am - 5:00 pm

26. Biorisk Assessment of Emergency Scenarios

Paul J. Huntly, Det Norske Veritas Pte Ltd., Singapore

The course will present an overview of issues surrounding the principles required for effectively understanding and controlling risks associated with potential emergency scenarios in containment laboratories. Sessions will be split between presentations of discussions around when formal risk assessments should be conducted, simple risk assessment philosophies and models, and interactive group exercises discussing the practical challenges in relation to what are the real vs. perceived risks in such situations, together with what may constitute reasonable and proportionate mitigation measures. Information, examples, and scenarios will be drawn from a wide experience of conducting risk assessments and audits in a wide range of facilities around the world. The aim will be not only to inform, but to stimulate discussion and challenge participants to question the realities of such situations, by considering risk holistically from a very practical perspective. The course will be of interest to those involved in day to day managers/supervisors of laboratories, but also to regulators and those responsible for planning, emergency response, etc.

Objectives:

- Understand some basic structures and philosophies of risk assessment as applied to emergency planning
- Develop an awareness of the range of emergency scenarios that may be encountered and how these can be assessed, plans can be developed and tested
- Gain an increased awareness that emergency situations are complex and difficult to manage, requiring basic planning based around the need to be able to reliably respond in a practical and logical manner
- Share experiences and views in relation to emergency situations and discuss different stakeholder risk perceptions and how these can impact on our ability to respond effectively

Suggested Background: Fundamentals of Biosafety, Risk Assessment

Target Audience: All safety professionals, laboratory workers, animal caregivers

Audience Level: Intermediate/Advanced

8:00 am - 5:00 pm

27. Basic Building Blocks of Biosafety

Benjamin Fontes, MPH, CBSP, Yale University, New Haven, CT

This course is **not** a formal introduction to biological safety, but is a course that will provide guidance for and review approaches to performing many of the core job responsibilities of the modern biosafety professional whose primary responsibilities are in the research setting (although many of the approaches demonstrated can be applied to other domains). The course has been developed for new biosafety professionals who are looking for ideas, suggestions, tips, approaches, sample forms, checklists, and even sample training slides as starting points to initiate their own approaches in their host locations. This is a “how to” class for “can do” students and the goal is to help show participants some successful approaches to performing the central duties of biosafety officers in research settings. This 8-hour class will focus on how to: 1) create registration forms for projects involving biohazards, including pathogens, rDNA, human materials, and other biohazards; 2) prepare for, conduct, report and follow-up on a biosafety laboratory inspection; 3) prepare and present basic biosafety training classes and obtain student feedback; 4) assist with the review, risk assessment, and development of safety plans for protocols involving biohazards in lab settings and for protocols involving small conventional research animals; 5) review rDNA protocols for compliance with the NIH rDNA Guidelines; 6) how to carry-out the biosafety officer’s roles and responsibilities associated with the Institutional Biosafety Committee; and 7) the class will only provide a starting “glimpse” at BSL-3 program elements, with a focus on what resources are available for assistance with inspections, facility validation and training both within and outside of their institutions.

Objectives:

- Give direct examples of how to apply baseline biosafety knowledge to real-life situations in the field
- Conduct laboratory inspections
- Review protocols for work with biohazards
- Prepare and conduct biosafety training classes

Suggested Background: Fundamentals of Biosafety
Target Audience: New biosafety professionals
Audience Level: Basic/Intermediate

8:00 am - 12:00 pm

28. Viral Vector Technology and Risk Assessment

Dawn Wooley, RBP, CBSP, Wright State University, Dayton, OH

A half-day course on the basics of viral vectors, safety considerations for working with viral vectors in the research studies, and points to consider for institutional review of viral vector protocols.

Objectives:

- Use and understand the basic vocabulary of viral vector technology
- Explain different types of viral gene delivery systems
- Identify potential hazards associated with viral vectors
- Describe methods of regulating gene expression

Suggested Background: Microbiology/Molecular Biology 101

Target Audience: All safety professionals, laboratory workers

Audience Level: Basic

1:00 - 5:00 pm

29. Law Enforcement Perspectives on Biosecurity: Prevention Through Partnerships

Edward You, Federal Bureau of Investigation, Washington, DC

William So, Federal Bureau of Investigation, Washington, DC

This course will provide administration, management, researchers, and students a law enforcement perspective of biosecurity and introduce key law enforcement programs that address incident prevention and response including: preparedness, countermeasures, investigations and operations, and intelligence. Students will learn about the Biological Weapons and Toxins Statute (18 USC 175) and how it serves as a basis for law enforcement. Students will be introduced to various communication strategies that can be used to foster responsibility in their community by enhancing trust and cooperation between scientific, public health, clinical communities, and the law enforcement agencies that serve them. Finally, students will put these concepts to practice in 2 small-scale, tabletop exercises that illustrate the challenges investigators face when responding to an incident at a biomedical research or treatment facility.

Objectives:

- Understand biosecurity roles and responsibilities of law enforcement agencies and research/public health institutes
- Recognize benefits and potential obstacles to improve cooperation among law enforcement agencies and research institutions regarding biosecurity
- Identify regulatory and statutory authorities of the U.S. biological threat prevention strategy and identify the public safety and investigative agencies that can be brought to bear in assessing a threat or responding to an incident
- Understand the authority and jurisdiction of key local, state, and federal law enforcement and public health stakeholders

Suggested Background: None

Target Audience: All safety professionals

Audience Level: Basic/Intermediate/Advanced

8:00 am - 5:00 pm

30. Biosafety Training

Per Staugaard, RBP, Biosafety Training and Consultancy, Utrecht, Netherlands

Vibeke Halkjaer-Knudsen, PhD, Sandia National Laboratories, Albuquerque, NM

This course is intended to provide a basis to set-up a training and qualification program in connection with activities involving biohazards. After an introduction to training in general and more specifically to education, knowledge, and experience, the trainees will set-up a training program in small groups for an imaginary workplace. Specific attention is paid to different training methods and to evaluation of training. Many training methods/tools will be used and practiced.

Objectives:

- Have an overview of different training methods and tools
- Combine the training methods in making a training program
- How to give feedback with the aid of video segments

Suggested Background: None
Target Audience: All safety professionals
Audience Level: Basic/Intermediate/Advanced

8:00 am - 5:00 pm

31. How to Develop an Export Management and Compliance Program Including the I-129 Attestation for Deemed Exports

Deborah Howard, CBSP, University of North Carolina, Chapel Hill, NC

How are you handling the certification regarding the Release of Controlled Technology or Technical Data to Foreign Persons in the United States? Learn about the Fundamental Research Exclusion and the impact Deemed Exports have on your organization. Learn to understand the 6 Terms of Use as it relates to foreign nationals in the workplace. You've been trained to ship hazardous materials according to the IATA/DOT regulations; but did you know many viruses, bacteria, and genetic elements of these pathogens require you to apply for an export control license through the Department of Commerce? All Select Agents and their genetic elements as well as several other recognized pathogens require a license to export. Did you know that items shipped out of the U.S. costing more than \$2,500 need to be filed with the U.S. Census Bureau? This class is intended for professionals who manage the shipping/exporting program including Deemed Exports at their university. There is more to shipping than classification, labeling, and marking; there are licensing, under-invoicing, and ITN numbers from the U.S. Census Bureau to consider when shipping anywhere outside the U.S. including Puerto Rico. Join us to learn about the SNAP-R program, Visual Compliance and how the International Traffic and Arms (ITAR) regulations fit into exporting. Troublesome clauses in contracts will also be covered. The class will discuss which pathogens and lab equipment require a license when exporting, how to obtain a license, Census Bureau requirements, recordkeeping, and much more.

Objectives:

- Describe the exporting agencies and what items/technology they regulate
- Recommend strategies for implementing an export management plan
- Discuss the I-129 Deemed Export Attestation and how it affects your organization
- Recognize situations where export controls will apply

Suggested Background: None

Target Audience: None

Audience Level: None

1:00 - 5:00 pm

32. Leadership Tools for Today's Biosafety Professional

Jim Welch, Elizabeth R. Griffin Research Foundation, Kingsport, TN

Sean G. Kaufman, MPH, CHES, CPH, Emory University, Atlanta, GA

LouAnn Burnett, CBSP, Sandia National Laboratories, Albuquerque, NM

Caryl Griffin, MSN, MDiv, Elizabeth R. Griffin Research Foundation, Kingsport, TN

Robert Ellis, PhD, CBSP, Colorado State University, Fort Collins, CO

Joseph Kozlovac, RBP, CBSP, United States Department of Agriculture, Beltsville, MD

Edward Stygar, III, MBA, CAE, American Biological Safety Association, Mundelein, IL

This 4-hour course is based on the 3-day ABSA/ERGRF Leadership Institute that is designed to foster and improve leadership skills amongst biosafety practitioners. The 3-day program, designed and led by Sean Kaufman of Emory University, combines presentations from recognized professionals with mentoring and network sessions that explore both common and unique problems. To familiarize ABSA members with Leadership and the Leadership Institute, the course will feature presentations from leaders in biosafety that will offer their different perspectives, experiences, and knowledge to be an effective leader in biosafety. This course will also offer an interactive mentoring session so participants can discuss issues with leaders and other participants.

Objectives:

- Be familiar with principles of effective leadership
- Understand the importance of leadership in biosafety
- Realize the need for leaders at all levels of biosafety

Suggested Background: None

Target Audience: None

Audience Level: None

6:30 - 8:00 pm

Opening Reception

Conference Agenda

Monday, October 31, 2011

7:00 am - 5:00 pm	Registration
7:00 - 8:00 am	Continental Breakfast
7:00 am - 4:00 pm	Vendor Exhibits
8:00 - 8:05 am	Welcome Master of Ceremonies
8:05 - 8:10 am	Local Arrangements Committee Welcome Natasha Griffith, MS, University of California, Los Angeles, CA Mimi Ton, MPH, California Institute of Technology, Pasadena, CA
8:10 - 8:15 am	Scientific Program Committee Welcome Richie Fink, CBSP, Pfizer, Andover, MA Robert Heckert, DVM, PhD, CBSP, Robert Heckert Consulting, Bowie, MD
8:15 - 8:30 am	ABSA President's Address Karen B. Byers, MS, RBP, CBSP, Dana-Farber Cancer Institute, Boston, MA
Session I	
8:30 - 9:30 am	Invited Paper Introduction: Karen B. Byers, MS, RBP, CBSP, Dana-Farber Cancer Institute, Boston, MA Building a Synthetic Cell Daniel Gibson, PhD, J. Craig Venter Institute, Rockville, MD
9:30 - 10:30 am	Wedum Lecture Award Presentation Introduction: Barbara Fox Nellis, RBP, CBSP, Barb Nellis Consulting, Sarasota, FL Genomics and a New Age in Global Disease Tracking Paul S. Keim, PhD, Northern Arizona University, Flagstaff, AZ
10:30 - 11:00 am	Exhibits, Posters, and Coffee Break
Session II:	
	Roundtable—Occupational Health Moderator: Cynthia Pressman Schwartz, PhD, Samuel Lunenfeld Research Institute, Mt. Sinai Hospital, Toronto, Ontario, Canada
11:00 - 11:20 am	Mandatory Vaccine Program at the University of Pittsburgh Jay Frerotte, University of Pittsburgh, Pittsburgh, PA
11:20 - 11:40 am	Emergency Response to a Laboratory-acquired Case of Septicemic Plague— Part I: The Surveillance Program at the University of Chicago Joseph Kanabrocki, PhD, CBSP, University of Chicago, Chicago, IL
11:40 am - 12:00 pm	Emergency Response to a Laboratory-acquired Case of Septicemic Plague— Part II: After the Infection Joseph Kanabrocki, PhD, CBSP, University of Chicago, Chicago, IL
12:00 - 12:20 pm	Medical Support Services for BSL-3 and -4 Labs at the National Institutes of Health James Schmitt, National Institutes of Health, Bethesda, MD
12:20 - 12:40 pm	Unified System for Evaluating Research Injuries and Exposures with Reporting Compliance and Incorporation of Lessons Learned Birgit Koriath-Schmitz, MD, Beth Israel Deaconess Medical Center, Boston, MA
12:40 - 1:00 pm	Q&A
1:00 - 2:30 pm	Lunch, Exhibits, and Posters

Session III: 1:30 - 2:30 pm	Poster Session Presenters Must Be Available
Session IV: 2:30 - 3:30 pm	Eagleson Lecture Award Presentation Introduction: Mary Ann Sondrini, Eagleson Institute, Sanford, ME Challenges Integrating Bioforensics and Biosafety Jennifer Goodrich, PhD, Department of Homeland Security, Ft. Detrick, MD
3:30 - 4:00 pm	Exhibits and Coffee Break
Session V: 4:00 - 4:10 pm	Updates Moderator: Karen B. Byers, MS, RBP, CBSP, Dana-Farber Cancer Institute, Boston, MA Update on the BSL-3 ANSI Standard Paul Jennette, RBP, Cornell College of Veterinary Medicine, Ithaca, NY
4:10 - 4:20 pm	Multistate Investigation of Laboratory-acquired <i>Salmonella</i> Typhimurium Infections Joanna Gaines, PhD, MPH, Centers for Disease Control and Prevention, Atlanta, GA
4:20 - 4:40 pm	Update on the ABSA High Containment Laboratory Accreditation Program Christina Thompson, RBP, CBSP, Thompson Biosafety, LLC, Greenfield, IN
4:40 - 5:00 pm	Update on the Griffin Grant Project—Development and Efficacy of a Livestock Handling Safety Video Tanya Dvorak, PhD, Kansas State University, Manhattan, KS
5:00 pm - Close	Members' Business Meeting (<i>Door prizes will be awarded—must be present to win.</i>)

Tuesday, November 1, 2011

7:00 am - 5:00 pm	Registration
7:00 - 8:00 am	Continental Breakfast
7:00 am - 4:00 pm	Vendor Exhibits
8:00 - 8:05 am	Welcome Master of Ceremonies
Session VI: 8:05 - 8:55 am	Griffin Lecture Award Presentation Introduction: Caryl Griffin, MSN, MDiv, Elizabeth R. Griffin Foundation, Kingsport, TN The Development of Biosafety and Biosecurity in Indonesia Indrawatti Sendow, DVM, IRCVS, Indonesia
Session VII: 8:55 - 9:15 am	Laboratory Design, Commissioning, Maintenance, and Operations—Part 1 Moderator: Barry Cohen, MPH, RBP, CBSP, Novartis Institute for Biomedical Research, Cambridge, MA Concept to Certification of BSL-3 Autopsy: A Case Study of the Nation's First Jonathan Y. Richmond, Jonathan Richmond & Associates, Inc., Southport, NC
9:15 - 9:35 am	Commissioning Process of a Mobile CL3 Laboratory Truck: Lessons Learned Kelly Anderson, BSc, Public Health Agency of Canada, Winnipeg, Manitoba, Canada
9:35 - 9:55 am	Why Are Opening New BSL-3 and BSL-4 Facilities Often Delayed by 1-2 Years? Barbara Fox Nellis, RBP, CBSP, Barb Nellis Consulting, Sarasota, FL
9:55 - 10:15 am	Q&A
10:15 - 10:35 am	Exhibits, Posters, and Coffee Break

Session VIII:	Laboratory Design, Commissioning, Maintenance, and Operations—Part 2 Moderator: Barry Cohen, MPH, RBP, CBSP, Novartis Institute for Biomedical Research, Cambridge, MA
10:35 - 10:55 am	Evolution of a Team-run BSL-3 Facility Maintenance Program at the University of Pittsburgh Regional Biocontainment Lab Lesley Homer, RBP, CBSP, Daniel Fisher, University of Pittsburgh, Pittsburgh, PA
10:55 - 11:15 am	Safely Handling Samples of Unknown Origin & Combination Biological/Chemical Hazard in Public Health Laboratories Mark Fitzgerald, HDR, Inc., Atlanta, GA
11:15 - 11:35 am	Q&A
11:35 am - 1:00 pm	Exhibits, Posters, and Lunch
Session IX:	Poster Session
12:00 - 1:00 pm	Presenters Must Be Available

Session X: First Concurrent		
Start Time	Waste Treatment Moderator: Richie Fink, CBSP, Pfizer, Andover, MA	Low Resource Country Issues Moderator: Robert Heckert, DVM, PhD, CBSP, Robert Heckert Consulting, Bowie, MD
1:00 pm	Effects of Relative Humidity, Concentration, and Exposure Time on the Efficacy of Chlorine Dioxide Gas Decontamination Mark A. Czarneski, ClorDiSys Solutions, Inc., Lebanon, NJ	Biosafety in Low Resource Settings—The Challenge Heather Sheeley, MS, UK Health Protection Agency, Salisbury, Wiltshire, UK
1:20 pm	Evaluation of Dry Fogging System for Microbial Inactivation Carol Stansfield, Canadian Science Centre for Human and Animal Health, Winnipeg, Manitoba, Canada	Practical Design Applications for Biocontainment Laboratories in Resource-challenged Regions Ryan Burnette, PhD, Alliance Biosciences, Richmond, VA
1:40 pm	Animal Tissue Disposal, New vs. Old Technologies Shanon Jones, Progressive Recovery, Inc., Dupon, IL	Enhancing the Capability to Control and Manage Biosafety and Biosecurity in Vietnam Paul J. Huntly, Det Norske Veritas Pte Ltd., Singapore
2:00 pm	How to Upgrade an Existing Biowaste Decontamination Installation? Carlyle Conn, ABC ACTINI LLC, Bradford, PA	Practices and Awareness Regarding Biosafety Measures Among Laboratory Technicians Working in Clinical Laboratories in Karachi Shahana Urooj Kazmi, University of Karachi, Karachi, Pakistan
2:20 pm	Assessment of Gaseous Decontamination Technologies for Use on Spacecraft Thomas Pottage, Health Protection Agency, Salisbury, Wiltshire, England	Knowledge and Awareness of Proper Waste Disposal and Routine Biosafety Measures Among Health Care Workers in Karachi Pakistan Shazia Hakim, PhD, Jinnah University for Women, Karachi, Pakistan
2:40 pm	Development of Autoclave Decontamination Cycles: Animal Carcasses and Laboratory Waste Miguel Grimaldo, University of Texas Medical Branch, Galveston, TX	Biosafety Professional Recognition: A Preliminary Assessment of Needs and Challenges from the International Community Michelle McKinney, CBSP, Defense Threat Reduction Agency, Fort Belvoir, VA

3:00 - 3:30 pm Exhibits, Posters, and Coffee Break

Session XI: Second Concurrent		
Start Time	Training and Personnel	Others
	Moderator: Barbara Fox Nellis, RBP, CBSP, Barb Nellis Consulting, Sarasota, FL	Moderator: Lesley Homer, RBP, CBSP, University of Pittsburgh, Pittsburgh, PA
3:30 pm	The Effects of Science and Safety Training on Biosafety Program Risk Perception Sean G. Kaufman, Emory University, Atlanta, GA	BSL-4 User Survey Results Aiding the Design of the Next Generation of Positive Pressure Suits David Harbourt, PhD, National Biosafety and Biocontainment Training Program, Bethesda, MD
3:50 pm	Opportunities for Risk Communication Using Bioram or How to Get People to Understand the Risks You Are Talking About Vibeke Halkjaer-Knudsen, PhD, Sandia National Laboratories, Copenhagen, Denmark	A Program for the Unknowns Accessioning Laboratory and All Hazards Receipt Facility Mitsy Canto-Jacobs, HDR Architecture Inc., Bethesda, MD
4:10 pm	Non-biologists Practicing Biology: New Threat or Opportunity? David H. Silberman, Stanford University School of Medicine, Stanford, CA	Quantitative PCR Assay for Detecting Viral Vector Shedding from Animals Dawn Wooley, RBP, CBSP, Wright State University, Dayton, OH
4:30 pm	Lab Self-inspection, Validation, and Follow-up: A Cyclic Process for Continuous Improvement in Laboratory Safety Meagan Parrott, Emory University, Atlanta, GA	Real-time Biosafety Air Exposure Monitoring Using FLIR Rapidplex® Robert Yamamoto, FLIR Systems, La Jolla, CA
4:50 pm	Implementation of a Standard Operating Procedure in a Basic Biomedical Research Laboratory Considering Biosafety Rules and Good Laboratory Practice Ricardo Melo Oliveira, Institute of Medical Biochemistry, Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil	Quality of Hand Washing Among Biosafety Level-2 Laboratory Workers James Johnston, PhD, CIH, University of Utah, Logan UT
5:10 pm	A Formal Method for Performing Biological Risk Assessments Including Use of a Matrix for Determining Containment Requirements James Hartling, RBP, Boehringer Ingelheim Vetmedica, Inc., Ft. Dodge, IA	NUS-MIT Safety and Health Management System Peer Review Program—Global Collaboration, Local Safety Excellence Saravanan Gunaratnam, RBP, National University of Singapore, Singapore

6:30 - 11:00 pm

Banquet at the Anaheim Marriot Hotel

Wednesday, November 2, 2011

7:00 am - 5:00 pm Registration

7:00 - 8:00 am Continental Breakfast

8:00 - 8:05 am Welcome
Master of Ceremonies

Session XII: Third Concurrent		
Start Time	Regulatory Aspects Moderator: Darlene Ward, RBP, Florida Atlantic University, Boca Raton, FL	Roundtable—Waste Disposal (Point/Counterpoint) Moderator: Richie Fink, CBSP, Pfizer, Andover, MA
8:05 am	Applying the Recent Supreme Court Decision of NASA vs. Nelson to the National Institutes of Health Biosurety Program Casey Skvorc, PhD, JD, National Institutes of Health, Washington, DC	Tissue Digesters and Effluent Decontamination Systems—New Designs/Old Applications? Ed Krisiunas, MPH, WNNW International, Inc., Burlington, CT
8:25 am	Transitional Operations: Guiding Owners Through Start-up Operations & Regulatory Compliance Debra Sharpe, MPH, CCHO, RBP, Working Buildings, LLC, Atlanta, GA	Title: TBA Jack Keene, DrPH, RBP, CBSP, Global Biohazard Technologies, Inc., Midlothian, VA
8:45 am	A Case Study for Post Approval Monitoring—Reporting an Untoward Event Robert Hashimoto, CBSP, University of California, Berkeley, CA	The Regulatory Perspective on Infectious Waste Treatment Technologies Alison Dabney, California Department of Public Health, Sacramento, CA
9:05 am	Maximizing Grant Funds for Facilities: Achieving Regulatory Compliance Without Sacrificing Programmatic Needs Benjamin Elliott, Lord, Aeck & Sargent, Architecture, Atlanta, GA	Q&A
9:25 am	Q&A	

9:45 - 10:20 am Coffee Break

Session XIII: Knudsen Award & Lecture
10:20 - 11:10 am Moderator: Judy LaDuc, RBP, University of Massachusetts, Amherst, MA
TBA

11:10 am - 1:00 pm **Honor Awards and Special Recognition Luncheon**
Presenter: Karen B. Byers, MS, RBP, CBSP, Dana-Farber Cancer Institute, Boston, MA
Arnold G. Wedum Distinguished Achievement Award
Everett J. Hanel, Jr. Award Presentation
John H. Richardson Special Recognition Award
International and National Poster Awards
Recognition of Certified Biosafety Professionals and Registered Biosafety Professionals
Krista Murray, RBP, CBSP, University of Delaware, Newark, DE
Paul Meechan, PhD, RBP, CBSP, Centers for Disease Control and Prevention, Atlanta, GA

Session XIV:

Roundtable—Animal Biosafety

Moderator: Kelly Flint, RBP, National Institutes of Health, Frederick, MD

1:00 - 1:20 pm

Working Safely with Animals in Containment

Timothy D. Mandrell, DVM, DACLAM, University of Tennessee Health Science Center, Memphis, TN

1:20 - 1:40 pm

Biosafety Officer's Experiences and Perspective—Biosafety Challenges in Animal Research: Risk Assessment, Training and SOPs

Benjamin Fontes, MPH, CBSP, Yale University, New Haven, CT

1:40 - 2:00 pm

Biocontainment Equipment, Animal Handling, & Decontamination

Michael Sidelsky, Sr., Allentown, Inc., Allentown, NJ

2:00 - 2:20 pm

Prion Work in Laboratory Rodents

Frank Warren, University of Delaware, Newark, DE

2:20 - 2:40 pm

Q&A

2:40 - 3:10 pm

Coffee Break

Session XV:

Roundtable—International Biosafety

Moderator: Janet Peterson, RBP, CBSP, University of Maryland, College Park, MD

3:10 - 3:30 pm

Definition of Biosecurity in Other Countries

AMEXBio—Edgar Sevilla-Reyes, PhD, National Institute of Respiratory Diseases, Mexico, D.F., Mexico or Alberto Zurita Gomez, Sr., Centro de Investigacion y de Estudios Avanzados del IPN, Mexico, D.F., Mexico

3:30 - 3:50 pm

Outreach to Research and Biosafety Communities

Elizabeth R. Griffin Research Foundation—James Welch, Elizabeth R. Griffin Research Foundation, Kingsport, TN

3:50 - 4:10 pm

Worldwide Building of Biosafety Associations—IFBA and the New IFBA Webmap and Communication Network

International Federation of Biosafety Associations—Brad Goble, TDV Global, Inc., Winnipeg, Manitoba, Canada

4:10 - 4:30 pm

What is Needed to Advance Biosafety/Biosecurity Internationally

Pakistan BioSafety Association—Erum Khan, MBBS, FCPS, Aga Khan University, Karachi, Pakistan

4:30 - 4:50 pm

Q&A

Close of Conference

Registration Form

54th Annual Biological Safety Conference October 27—November 2, 2011

ABSA Member ID Number: _____ Nonmember

Last Name: _____ First Name: _____
 Organization: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ E-mail: _____
 Emergency Contact: _____
 Phone: _____

Conference Fees	Pre Oct. 7	Post Oct. 7	Amount
ABSA Member	\$685	\$735	\$ _____
Nonmember	\$860	\$910	\$ _____
One-day (day _____)	\$230	\$255	\$ _____
Emeritus Member	\$310	\$350	\$ _____
2011 Individual ABSA Dues	\$200	\$200	\$ _____

Registration includes: continental breakfasts, breaks, lunches, Opening Reception, and banquet. One-day registration does not include the banquet.

Dietary Restrictions: _____
Additional Tickets
 Additional lunch (\$50 each) \$ _____
 Banquet (\$120 each) \$ _____
 Total from course(s) \$ _____
 Total amount enclosed or charged: \$ _____

Registration is not complete without payment or credit card information. Purchase Orders are not accepted. Check must be made payable to "ABSA" and bank drafted in U.S. dollars or it will be returned.

Visa MasterCard American Express Check enclosed
 Card #: _____ Exp. Date: _____
 Signature: _____

Course space is limited. No course substitutions or changes prior to conference. **Please visit our web site at www.absaconference.org for course availability and online registration.** Mail to ABSA, 1200 Allanson Road, Mundelein, IL 60060-3808 or fax to 847-566-4580.

Cancellation Policy: Cancellations received before September 26, 2011—90% refund; cancellations received between September 26 - October 3, 2011—50% refund. Cancellations received after October 3, 2011—no refund.

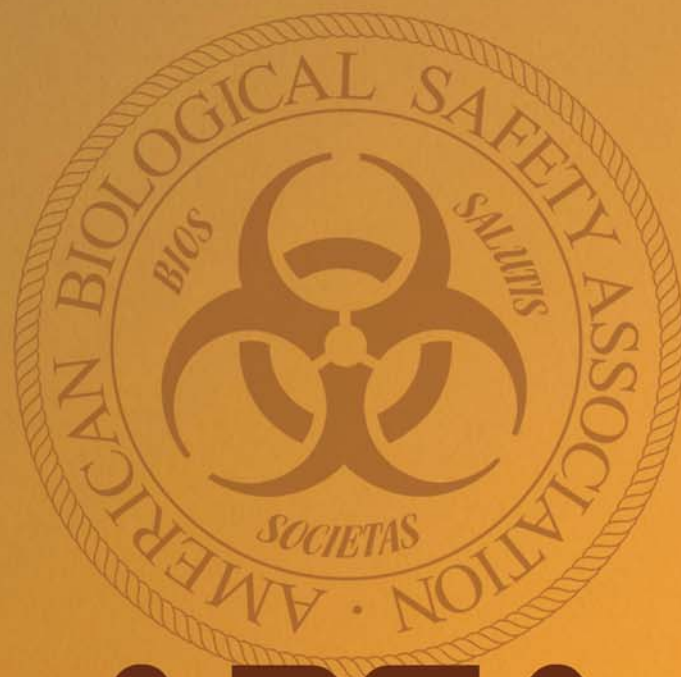
Preconference Courses

Thursday, October 27, 2011	Member	Nonmember	Amount
1. Doing What Works/Matters	\$500	\$550	\$ _____
2. Int'l Infectious Substance Shipping	\$500	\$550	\$ _____
3. Implementing a Lab Biorisk Management System (2-day course)	\$950	\$1000	\$ _____
4. ABSL-3 Facility Design	\$500	\$550	\$ _____
Friday, October 28, 2011			
5. Process Biosafety	\$500	\$550	\$ _____
6. Biosafety Instructor	\$500	\$550	\$ _____
7. Intro to Biological Risk Assessment	\$500	\$550	\$ _____
8. Infectious Substance Shipping	\$500	\$550	\$ _____
9. BSL-3 Operations and Maintenance	\$500	\$550	\$ _____
10. Fundamentals of Microbiology	\$295	\$345	\$ _____
11. Molecular Biology	\$295	\$345	\$ _____
12. Engineering for the Biosafety Professional	\$500	\$550	\$ _____

Saturday, October 29, 2011	Member	Nonmember	Amount
13. Biosafety Management Techniques	\$500	\$550	\$ _____
14. Basic Virology	\$500	\$550	\$ _____
15. Biocontainment Facility Design	\$500	\$550	\$ _____
17. rDNA Guidelines	\$295	\$345	\$ _____
18. Audits and Inspections	\$295	\$345	\$ _____
19. Aerobiology in Infectious Disease Research	\$500	\$550	\$ _____
20. Waste Water Management	\$500	\$550	\$ _____
22. Environmental Biotoxins	\$295	\$345	\$ _____

Sunday, October 30, 2011	Member	Nonmember	Amount
23. Working Safety in BSC	\$295	\$345	\$ _____
24. The Physics Behind Biocontainment	\$295	\$345	\$ _____
25. Regulatory Inspections/Audits	\$500	\$550	\$ _____
26. Biorisk Assessment	\$500	\$550	\$ _____
27. Basic Building Blocks	\$500	\$550	\$ _____
28. Viral Vector Technology	\$295	\$345	\$ _____
29. Law Enforcement Perspectives	\$295	\$345	\$ _____
30. Biosafety Training	\$500	\$550	\$ _____
31. Export Management	\$500	\$550	\$ _____
32. Intro to Biosafety Leadership	\$295	\$345	\$ _____

Registration for two 4-hour courses on the same day will include lunch.



ABSA

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www.absaconference.org

ABSA

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