

## BSL3 Seminar Series

### ARE YOU INTERESTED IN:

- Learning from 8 biosafety / engineering experts who individually bring 20+ years of experiences to the class discussions?
- Enhancing your grasp of the senior level of CDC and APHL's "Biosafety Laboratory Competency Guidelines"?
- Learning more about the BMBL 5th edition guidelines on airflow reversals during HVAC failures and approaches to meet those guidelines?
- Renovating an aging facility to meet new BSL3 requirements or building a new BSL3 lab?
- Experiencing creative training methods you can apply in your own facility?
- Reducing lab operation and maintenance costs without sacrificing safety?

### WHAT WE OFFER

- A state of the art BSL3 laboratory training facility
- Limited enrollment for maximum instructor/student interaction
- Faculty teams made up of veteran lab design and biosafety experts who are also experienced instructors
- A mix of case studies, lecture, demonstrations, facility tours, group exercises and hands-on workshops
- Many structured opportunities to network and share challenges and solutions with instructors and fellow students

### WHO SHOULD ATTEND?

Architects, biosafety professionals, certifiers, commissioning agents, design engineers, facility managers, health and safety professionals and laboratorians in leadership positions.

## Verifying BSL3 Performance

September 19-20, 2019 | [www.eagleson.org/VBP](http://www.eagleson.org/VBP)

Focus on the important considerations when commissioning and verifying the performance of BSL3 laboratories. Participate in hands-on workshops practicing the tests required to verify lab performance.

### PARTICIPANTS WILL LEARN

- The relative roles of government guidance, industry best practices, and risk assessment related to commissioning and re-verification.
- How to develop a performance verification process appropriate for your facility.
- How to test and verify system accuracy based on risk assessment.
- How to generate and critique biosafety facility commissioning and verification documents.

### INSTRUCTORS

**Dan Cook, LEED AP**, Cornerstone Commissioning  
**Dan Frasier, PE, CCP**, Principal, Cornerstone Commissioning  
**J. Paul Jennette, MS, PE, CBSP**, Director of College Biocontainment Operations, Cornell University College of Veterinary Medicine

"This course is both academic and practical with a strong hands-on approach to enhance the learning process. Class activities and BSL3-specific tests are used to illustrate the principles of facility performance verification. The interactive nature of this course has made it a pleasure to teach." - Dan Frasier (Lead Instructor)

**More BSL3 in  
Maine this Fall**

**EAGLESON INSTITUTE**  
175 Gatehouse Road  
Sanford ME 04073



# BSL3 SEMINAR SERIES

North Carolina State Laboratory  
of Public Health | Raleigh, NC

April 29- May 3, 2019



**EAGLESON INSTITUTE**  
*Globally Promoting the Principles and Practices of Health and Safety in the Life Sciences Community*

APRIL 29-30, 2019: **BSL3 Facilities: Design and Operation**

May 1-2, 2019: **Advanced BSL3 Work Practices and Procedures**

May 3, 2019: **Lecture and Tour: Duke University's RBL and Lemur Center**

for more information or to register, please visit  
[www.eagleson.org/BSL3](http://www.eagleson.org/BSL3)

## BSL3 Facilities: Design and Operation

APRIL 29-30, 2019 | [www.eagleson.org/DCB](http://www.eagleson.org/DCB)

## Advanced BSL3 Practices and Procedures

May 1-2, 2019 | [www.eagleson.org/APP](http://www.eagleson.org/APP)

## Lecture and Tour of Duke University's Regional Biocontainment Laboratory and Lemur Center

May 3, 2019 | 8:00 AM - 12:30PM



Our teaching team of a design engineer, biosafety engineer, and commissioning agent provide practical, "been-there, done-that" information, incorporating real-world experience as well as theoretical knowledge.

### REASONS TO ATTEND

- Study the impact of design on operations, safety, and sustainability of BSL3/ABSL3 labs.
- Examine the impact of energy efficiency/sustainability efforts on cost savings and safety.
- Focus on case studies and lessons learned in the many facilities designed or operated by our instructors.
- Participate in both an architectural and mechanical tour of a state of the art laboratory facility.

### TOPICS INCLUDE

- Risk assessment as a BSL3 design driver
- Complexities of the design/construction/commissioning/verification processes
- BSL3 laboratory guidelines
- Primary containment equipment and exhaust needs
- Architectural planning issues
- Role of HVAC in containment
- Using airflow to control and remove airborne contaminants
- Designing for decontamination and waste management
- Blueprint reading 101 (optional)

### INSTRUCTORS

**Dan Frasier, PE, CCP**, Principal, Director of Commissioning Services, Cornerstone Commissioning  
**William T. Freeman, PE, LEED AP, BD+C**, Director of Science & Technology, AHA Consulting Engineers  
**J. Paul Jennette, MS, PE, CBSP**, Director of College Biocontainment Operations, Cornell University College of Veterinary Medicine

### WHAT PAST PARTICIPANTS SAID ABOUT THIS COURSE:

- "Very informative [you] provide basic knowledge along with good background information that will allow me to make a positive impact on my facility."
- "Great two day class, lots of good info, but real life examples were best."
- "A very well done course. I would recommend it to anyone. As a BSL3 user who worked in the lab & didn't care how it worked, to now being an operations manager for a BSL3 and needing to know how it works, this class was perfect for helping to learn more about how the labs work."

Register for "BSL3 Facilities: Design and Operation" and "Advanced BSL3 Work Practices and Procedures" to receive a \$200 discount off your registration. Group Discounts Available. See Website for Details.

This advanced-level class utilizes scenarios and hands-on workshops to reinforce concepts contained in the senior level of CDC's recent "Biosafety Laboratory Competency Guidelines."

### REASONS TO ATTEND

- Follow a real-world case study from initial risk assessment through a variety of scenarios and explore how changes in a project can affect practices, PPE, and other controls.
- Learn how to prepare for and train others to respond to emergencies.
- Examine the roles played by biosecurity and medical surveillance in protecting your workers and the public.
- Participate in interactive learning activities you can use in your own facilities.
- Explore competencies through case studies, personalized instruction and hands-on activities in a BSL3 training lab.

### TOPICS INCLUDE

- Risk assessment as an ongoing process through the life of a BSL3 project
- Operational considerations for BSL3 facilities
- Selecting and maintaining Personal Protective Equipment (PPE)
- Ensuring safe operation of Biological Safety Cabinets (BSCs)
- Dealing with occupational health issues in BSL3 labs
- Planning for and responding to emergencies
- (Almost) painless laboratory inspections
- Ensuring biosecurity

### INSTRUCTORS

**Scott Alderman, CBSP**, Director of Operations, Regional Biocontainment Laboratory at Duke  
**James Hill, MD, MPH, FACOEM**, Medical Director, Occupational Health, University of North Carolina  
**J. Paul Jennette, MS, PE, CBSP**, Director of College Biocontainment Operations, Cornell University College of Veterinary Medicine  
**Paul Meechan, PhD, MPH, RBP, CBSP**, Biosafety Consultant  
**Mary Ann Sondrini, EdM**, Executive Director, Eagleson Institute

More speakers being confirmed. See website for final speaker list.

### WHAT PAST PARTICIPANTS SAID ABOUT THIS COURSE:

- "Excellent 2 days of training. I learned so much from instructors and from the other participants. Was very surprised by the variety of experiences and occupations that were represented in participants...this was a strength of the program."
- "Overall one of the best BSL3 [classes] I have attended. Informative and I enjoyed the interactive exercises/discussions... all of presenters were very engaging & enthusiastic."
- "I enjoyed hearing input from different types of professionals, laboratorians, biosafety officers, facility people, pharma it was good to have diversity."

Stay Friday for the post conference lecture and tour of Duke University's Regional Biocontainment Lab and Lemur Center.

Learn how Duke University has handled the issues addressed in the BSL3 Seminar Series courses.

Duke University's Regional Biocontainment Laboratory (RBL), primarily funded by the NIH National Institute of Allergy and Infectious Disease, is used to perform basic and translational research to make drugs, vaccines and diagnostics to protect society from emerging infections and biothreats. The RBL is currently registered with the CDC Select Agent Program to perform laboratory and animal work at BSL3 and ABSL3 labs. The facility tour will include a discussion of current and future research activities including high-containment aerobiology, cell-sorting and in vivo imaging. Throughout the visit the RBL staff will share its approach to proper biosafety management, including training of personnel, required PPE, compliance monitoring, maintenance of the mechanical systems, annual validation of the high-containment areas, and more. For more information about the laboratory, see <https://shared-resources.dhvi.duke.edu/rbl>

**SPECIAL BONUS:** The laboratory lecture and tour will be followed by a tour of the Duke Lemur Center, which houses nearly 250 individual animals across 21 species of prosimian primates.

## Registration Information

### TUITION

"BSL3 Facilities: Design and Operation" and "Advanced BSL3 Practices and Procedures" include a course manual, lunch each day, and an Eagleson Institute certificate. Individual tuition is \$995 (per class) if paid by March 22, 2019 and \$1045 (per class) after March 22, 2019. Group discounts are available. "Lecture and Tour of Duke University's Regional Biocontainment Laboratory and Lemur Center" is \$45. Visit our website for details. To register, go to [www.eagleson.org/BSL3](http://www.eagleson.org/BSL3), or call 207-490-1076 to register by phone.

### LODGING

A block of rooms for BSL3 Seminar Series attendees have been reserved at the Hilton Garden Inn Raleigh/Crabtree Valley, a short drive from the North Carolina Public Health Laboratory, at a special rate of \$149. Breakfast is included in this rate. Please note: A limited number of government room rates are available. To make a reservation, call 919-703-2518 and refer to the Eagleson Institute BSL3 Seminar Series and mention EINSTU to secure the group rate by March 28, 2019, or visit [https://hiltongardeninn.hilton.com/en/gi/groups/personalized/R/RDUCVGI-EINSTU-20190428/index.jhtml?WT.mc\\_id=POG](https://hiltongardeninn.hilton.com/en/gi/groups/personalized/R/RDUCVGI-EINSTU-20190428/index.jhtml?WT.mc_id=POG).