

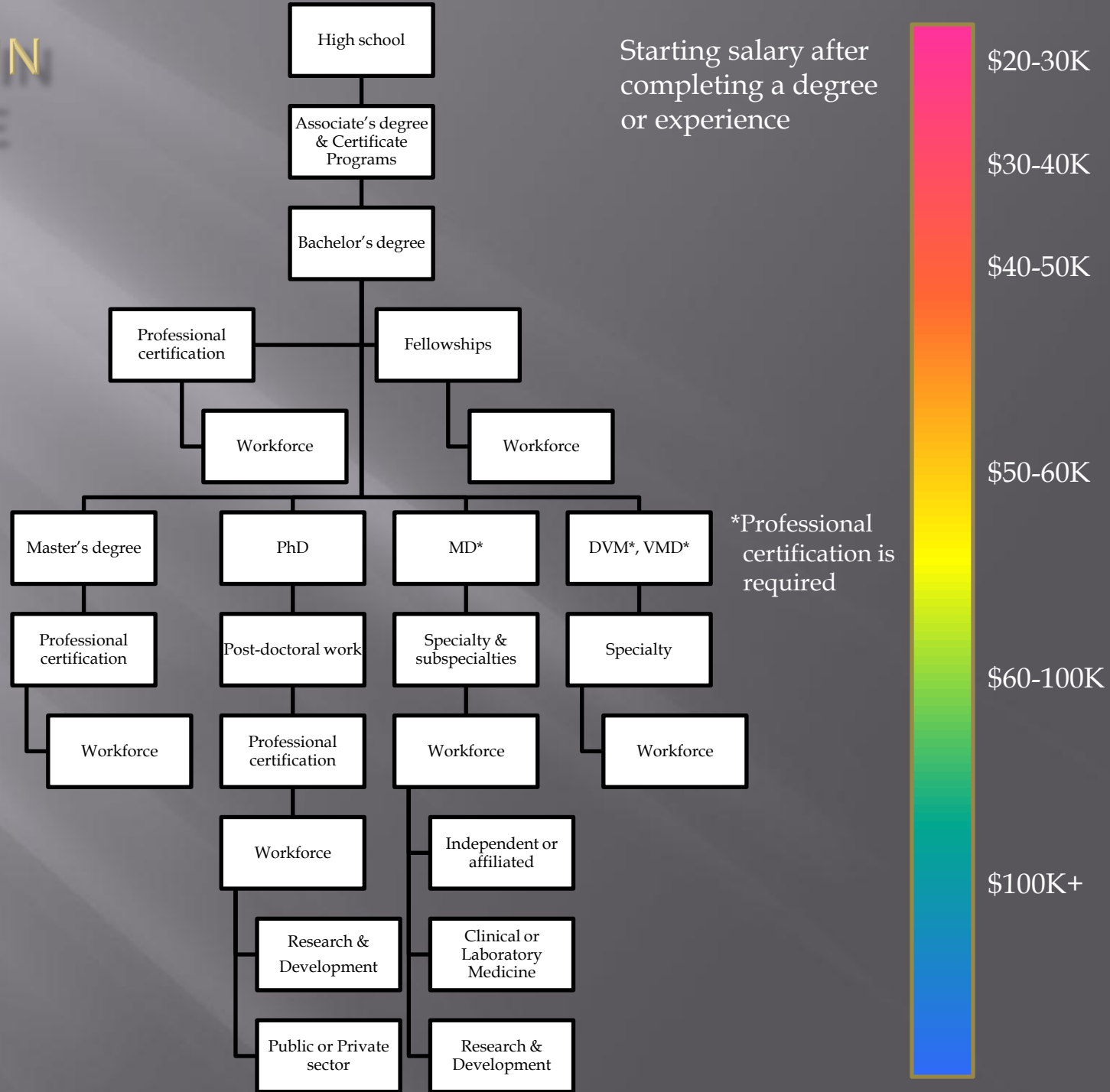


Careers in Laboratory Science

New Jersey
Public Health and
Environmental
Laboratories



CAREERS IN SCIENCE



Public Health Training Fellowships

We are looking for motivated students, graduates, and health professionals for a variety of exciting public health training programs.

Email page link
Print page

Student Internships and Fellowships



- High school students
- College students
- Graduate students
- Medical students
- Veterinary students

Post-doctoral Research Fellowships



- Scientists
- Researchers
- Laboratorians
- Public health professionals

Career Training Fellowships



- Graduates with bachelor's, master's, or doctoral degree
- Medical or health professionals
- Public health professionals

CDC Training Resources

- CDC Learning Connection
- Minority Health Workforce Internship Opportunities
- Training and Continuing Education Online

Contact Us:

Centers for Disease Control and Prevention
1600 Clifton Rd
Atlanta, GA 30333

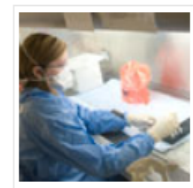
800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348

[Contact CDC-INFO](#)

- ▼ Fellowships
 - EID Laboratory Fellowships
 - Bioinformatics in Public Health Fellowship Program
 - Environmental Health Training
- ▶ Laboratory Leadership
- ▶ Job Center

TEXT SIZE T T T

EID Laboratory Fellowships



Emerging Infectious Diseases Fellowship Program

Preparing scientists for careers in public health laboratories

SAVED TOPICS: [Emerging Infectious Diseases](#), [Fellowships](#), [Workforce](#)

SAVE PRINT SEND



The Emerging Infectious Diseases (EID) Laboratory Fellowship Program, sponsored by APHL and CDC, trains and prepares scientists for careers in public health laboratories and supports public health initiatives related to infectious disease research.

The EID Advanced Laboratory Training Fellowship is a **one-year program** designed for bachelor's or master's level scientists, with emphasis on the practical application of technologies, methodologies and practices related to emerging infectious diseases. The EID Laboratory Research Fellowship is a **two-year program** designed for doctoral level (PhD, MD or DVM) scientists to conduct high-priority research in infectious diseases.

CONTACT

HEATHER RONEY, MA
Fellowship Program Manager
240.485.2778
fellowships@aphl.org

APPLY ONLINE

http://www.asm.org/index.php/certification


njlincs.net Emerging Infectious Dis... Certification

File Edit View Favorites Tools Help

Convert Select

Suggested Sites Web Slice Gallery Free Hotmail MSN

LOOKING FOR MORE? To find Books, Periodicals, Microbe Magazine, Join/Renew Membership

Visit  ASMscience



[Join](#) | [Renew](#) | [Sitemap](#) | [Contact Us](#) | [Login](#)



Enter your search terms...

Search



[Science](#)

[Network](#)

[Careers](#)

[Policy](#)

[ASM Programs](#)

[Microbiology for the Public](#)

[For Members](#)

AMERICAN COLLEGE OF MICROBIOLOGY

The American College of Microbiology, one of the core components of the ASM's Professional Practice Committee, is responsible for certification of microbiologists and immunologists, accreditation of postdoctoral training programs, and other programs consistent with its mission of providing leadership in promoting the high quality and ethical practice of the microbiology and immunology professions for the benefits of human, animal, and environmental well-being.

Looking for Certification?

The American Board of Medical Microbiology (ABMM) certifies the expertise of doctoral-level microbiologists seeking to direct public health or clinical microbiology laboratories.

The American Board of Medical Laboratory Immunology (ABMLI) certifies the expertise of doctoral-level immunologists seeking to direct laboratories engaged in the practice of medical laboratory immunology.

The National Registry of Certified Microbiologists (NRCM) certifies microbiologists at the baccalaureate, master's, and doctoral levels. Certification is offered in biological safety; food safety and quality; and pharmaceutical and medical device.

More about the American College of Microbiology

[The Board of the American College of Microbiology](#)

[Certify Your Worth](#)

More Information on Clinical Microbiology

[Clinical Microbiology Portal](#)

["Clinical Microbiology in the 21st Century" Report](#)

[What does ASM have for Clinical Microbiologists?](#)

Focus on Careers in Clinical Microbiology

"The health of individuals and communities hinges on the services and expertise of clinical microbiologists." D. Wolk, 2010

What does a clinical microbiologist do?

- Recommends methods for obtaining and transporting clinical specimens that would be most helpful in diagnosing infectious diseases.
- Isolates and identifies bacterial, viral, fungal and parasitic agents that are likely to be contributing to infectious processes.
- Determines the susceptibility of microorganisms to various antimicrobial agents that could be used to treat infections caused by the microorganisms.
- Reports results to healthcare providers caring for patients in a clear, concise and clinically relevant manner.
- Works with healthcare teams, including public health officials, to improve processes to diagnose and control infectious diseases with a strong emphasis on effective communication at all levels.
- Works with pharmaceutical and medical device manufacturers to develop new and improved technologies to confront emerging infectious diseases.

Watch a video to learn more about the day-to-day activities of a Clinical Microbiologist.

<http://www.youtube.com/watch?v=uaw16xE5ooM>

Where does a clinical microbiologist work?

- Hospital Laboratories
- Commercial and Reference Laboratories (where more complex lab tests are performed)
- Federal and State Government Laboratories
- State and Local Public Health Laboratories
- Universities and Medical Schools
- Pharmaceutical Companies and Diagnostic Instrument Manufacturers

How many ASM members have clinical microbiology as their focus?

Of the 38,000 ASM members, approximately 20% indicate their primary career focus is clinical microbiology.

Considering increasing challenges in healthcare today, where is the greatest need for clinical microbiologists?

- Develop new tests to identify emerging infectious diseases that are rapid, clinically relevant and cost effective.
- Identify innovative ways to assess the activity of antimicrobial agents against microorganisms that are most predictive of therapeutic outcomes.
- Provide guidance to computer programmers to develop information technology that can best serve clinicians when ordering tests, reviewing test results and integrating test results with each patient's electronic medical record.
- Work with healthcare teams to better control transmission of infectious diseases within healthcare settings and in communities in the USA and beyond.

-over-



Career Tracks and Educational Opportunities / Requirements for Clinical Microbiologists

Position	Educational Requirements
Medical Laboratory Technician (MLT)	Associate's Degree Completion of an accredited MLT program more here National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) http://www.naacls.org/ American Society for Clinical Laboratory Science (ASCLS) http://ascls.site-ym.com/
Medical Technologist (MT) aka Medical Laboratory Scientist (MLS), Clinical Laboratory Scientist (CLS)	BS in the biology / health-related sciences Completion of an accredited MT program more here National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) http://www.naacls.org/ American Society for Clinical Laboratory Science (ASCLS) http://ascls.site-ym.com/
Doctoral Level Clinical Microbiologist	PhD and/or MD in Microbiology/Molecular Biology Post Doc through ASM's Committee on Postgraduate Education Programs (CPEP) training (optional but desirable) http://www.asm.org/index.php/professional-development/postgraduate-training-programs-in-medical-microbiology-and-immunology-accredited-by-the-committee-on-postgraduate-education-programs.html
Board Certification for MLT / MT / PhD and/or MD	
American Society of Clinical Pathology (ASCP) – for MLT / MT http://www.ascp.org/Board-of-Certification/GetCertified ASM - http://www.asm.org/index.php/professional-development/national-registry-of-microbiologists-nrm.html Doctoral level only: American Board of Medical Microbiology (ABMM) - for individuals who want to direct public health or clinical microbiology laboratories www.microbiologycert.org American Board of Medical Laboratory Immunology (ABMLI) - for individuals who want to direct medical immunology laboratories www.microbiologycert.org	
...more on Clinical Microbiology at ASM	
Additional career information - http://clinmicro.asm.org/index.php/about-clinical-microbiology Clinical Microbiology Portal - http://clinmicro.asm.org/ Professional Practices Committee - http://www.asm.org/index.php/professional-development/professional-practice-committee.html Division C website - http://www.asm.org/division/c/index.htm	



Career Tracks and Educational Opportunities/Requirements:

- a. Medical Laboratory Technician (MLT) Requirements
 - (1) Associate's Degree
 - (2) Completion of an accredited MLT program

- b. Medical Technologist (MT)/Clinical Laboratory Scientists (CLS) Requirements
 - (1) BS/MS in the health sciences
 - (2) Completion of an accredited MT program

- c. Doctoral-level Clinical Microbiologist
 - (1) PhD in Microbiology/Molecular Biology
 - (2) Committee on Postgraduate Education Programs (CPEP) training
<http://www.asm.org/index.php/professional-development/postgraduate-training-programs-in-medical-microbiology-and-immunology-accredited-by-the-committee-on-postgraduate-education-programs.html>

- d. Board Certifications for MLT/MT/PhD
 - (1) American Society of Clinical Pathology (ASCP) -<http://www.ascp.org/Board-of-Certification/GetCertified>
 - (2) ASM - <http://www.asm.org/index.php/professional-development/national-registry-of-microbiologists-nrm.html>
 - (3) American Board of Medical Microbiology (ABMM) board certification for individuals who want to direct public health or clinical microbiology laboratories
<http://www.asm.org/index.php/professional-development/american-board-of-medical-microbiology-abmm.html>
 - (4) American Board of Medical Laboratory Immunology (ABMLI) board certification for individuals who want to direct medical immunology laboratories
<http://www.asm.org/index.php/professional-development/american-board-of-medical-laboratory-immunology-abmli.html>

- e. ASM Professional Society
 - (1) Clinical Microbiology Portal
<http://clinmicro.asm.org/>
 - (2) Professional Practice Committee
<http://www.asm.org/index.php/professional-development/professional-practice-committee.html>
 - (3) Division C website
<http://www.asm.org/division/c/index.htm>

For further information about a career in clinical microbiology please go to:
<http://clinmicro.asm.org/index.php/about-clinical-microbiology>



Centers for Medicare & Medicaid Services

Learn about [your healthcare options](#)

Search

Medicare

Medicaid/CHIP

Medicare-Medicaid
Coordination

Private
Insurance

Innovation
Center

Regulations &
Guidance

Research, Statistics,
Data & Systems

Outreach &
Education

Home > Regulations and Guidance > Clinical Laboratory Improvement Amendments (CLIA) > Certification Boards for Laboratory Directors of High Complexity Testing

Clinical Laboratory Improvement Amendments (CLIA)

[How to Apply for a CLIA Certificate, Including International Laboratories](#)

[State Agency & Regional Office CLIA Contacts](#)

[Accreditation Organizations/Exempt States](#)

[Categorization of Tests](#)

[Certificate of Waiver Laboratory Project](#)

Certification Boards for Laboratory Directors of High Complexity Testing

[CLIA Brochures](#)

[CLIA Regulations and Federal](#)

Certification Boards for Laboratory Directors of High Complexity Testing

The qualification for a laboratory director of high complexity testing at 42 CFR 493.1443(b)(3)(i) is that the laboratory director must hold an earned doctoral degree in a chemical, physical, biological or clinical laboratory science from an accredited institution and be certified and continue to be certified by a board approved by HHS. The current approved boards are the following:

1. ABB – American Board of Bioanalysis
2. ABB public health microbiology certification
3. ABCC – American Board of Clinical Chemistry
4. ABCC 24-month Commission on Accreditation in Clinical Chemistry (COMACC) accredited program
5. ABFT – American Board of Forensic Toxicology (limited to individuals with a doctoral degree)*
6. ABHI – American Board of Histocompatibility and Immunogenetics
7. ABMG – American Board of Medical Genetics
8. ABMLI – American Board of Medical Laboratory Immunology
9. ABMM – American Board of Medical Microbiology
10. NRCC – National Registry of Certified Chemists (limited to individuals with a doctoral degree) *

* These boards certify non-doctoral individuals also.



ABSAs

 Search: Go

Calendar

Members Only

About ABSAs | Membership | ABSAs in Action | Affiliates & Alliances | Education | Career | Publications | Resources | ABSAs Store

American Biological Safety Association



The **American Biological Safety Association** (ABSAs) was founded in 1984 to promote biosafety as a scientific discipline and serve the growing needs of biosafety professionals throughout the world. The Association's goals are to provide a professional association that represents the interests and needs of practitioners of biological safety, and to provide a forum for the continued and timely exchange of biosafety information.

On this official website of the American Biological Safety Association, you can find information about the **ABSAs Annual Conference**, **ABSAs Review Course**, **Principles and Practices of Biosafety Course** and other educational offerings. There is also extensive information about ABSAs's two credentials, the **Certified Biological Safety Professional (CBSP)** credential, and the **Registered Biosafety Professional (RBP)** credential. The site also contains important biosafety publications such as the **Anthology of Biosafety** series and **Applied Biosafety: Journal of the American Biological Safety Association**. If you are interested in becoming an ABSAs member, please see ABSAs's **membership information and membership application**. There is also other important biosafety information on this site including: the **Risk Group database**, **Biosafety Links**, **Biosafety Listserv**, **White Papers**, **Job Opportunities**, and more. Please e-mail info@absa.org if you have any questions or would like additional information.

Have Credentials?
Are you a **CBSP** or **RBP**?

Become a **Certified Biological Safety Professional (CBSP)** >
Become a **Registered Biosafety Professional (RBP)** >

ABSAs 57th Annual

Applied Biosafety:

ABSAs News [ABSAs Calendar >](#)

[ABSAs Job Board >](#)

Renew Your ABSAs Membership! >

7th Annual ABSAs/Emory/ERGF Leadership Institute for Biosafety Professionals: Taking the Lead- Building and Sustaining Partnerships in Safety >
April 21-24, San Diego, CA

Introducing a NEW WEBSITE brought to you by ABSAs!

NEW! Biosafety Buyer's Guide >

Biosafety Buyer's Guide
American Biological Safety Association

[Biosafety Estimates](#) | [Biosafety Consultants](#) | [Distributors](#)
[Engineers](#) | [Lab Equipment](#) | [Training](#) | [Utilities](#)

Featured Companies

The Baker Company 2000 Baker Road, P.O. Box 5, Boston, MA 02111 800-462-2247 617-222-2282 www.bakerco.com	Health Services 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.healthservices.com
Biosafety Consulting for Healthcare Facilities, LLC 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.biosafetyconsulting.com	Health Services 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.healthservices.com
Health Services 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.healthservices.com	Health Services 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.healthservices.com
Health Services 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.healthservices.com	Health Services 10000 North Central Expressway, Suite 100 Dallas, TX 75243 800-451-2888 www.healthservices.com

OUR AD HERE | **YOUR AD HERE**

Is There Credentialing for Biosafety Professionals?

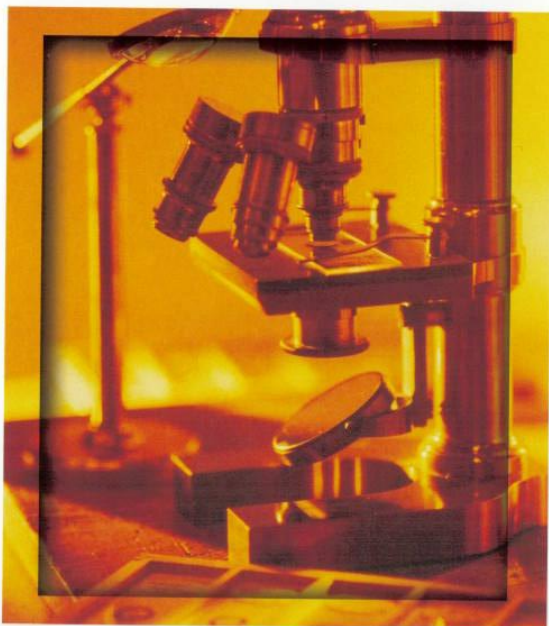
Currently there are two types of credentialing for biosafety professionals: Registered Biosafety Professional and a Certified Biological Safety Professional.

Certified Biological Safety Professional (CBSP)

Certified Biological Safety Professionals (CBSP) pass a written exam, developed by ABSA and administered by the National Registry of Certified Microbiologists (NRCM), and meet experience and educational criteria set by ABSA.

Registered Biosafety Professional (RBP)

A Registered Biosafety Professional (RBP) is an individual with a documented university education or specialized training in relevant biological safety disciplines and been found to be eligible for registration by the ABSA Registration Evaluation Board.



Vision

ABSA, the leader in the profession of biological safety.

Mission Statement

The American Biological Safety Association (ABSA) is dedicated to expanding biological safety awareness to prevent adverse occupational and environmental impact from biohazards.

Goals

Expand professional and public awareness of biological safety through effective communication.

Participate in the development of biological safety and biosecurity standards, guidelines, and regulations.

Develop ABSA as the recognized resource for professional and scientific expertise in biological safety and biosecurity.

Advance biological safety as scientific discipline through education, research, and professional development.

For additional information and resources on Biosafety, including requirements for RBP and CBSP contact:

American Biological Safety Association

1200 Allanson Road

Mundelein, IL 60060

866-425-1385

info@absa.org

www.absa.org



Biosafety and the Profession



ABSA

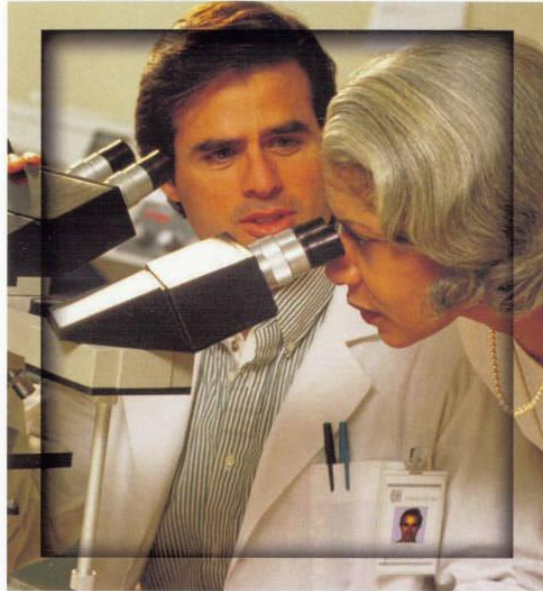
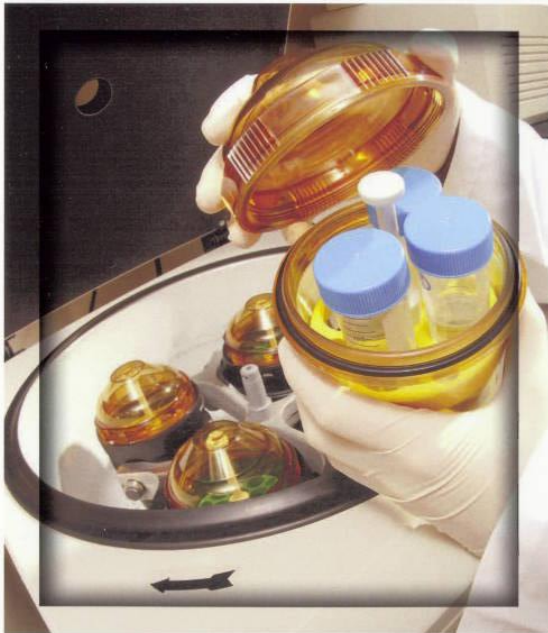
American Biological Safety Association

What is Biosafety?

The concept of Biological Safety (or biosafety) has paralleled the development of the science of microbiology and its extension into new and related areas including tissue culture, recombinant DNA, animal studies, molecular biology, synthetic biology, and biotechnology. The knowledge and skill gained by microbiologists necessary to isolate, manipulate, and propagate pathogenic microorganisms required parallel development of containment principles, facility design, and practices and procedures to prevent occupational infections in the workplace or release of the organisms to the environment.

What is a Biosafety Professional?

A biosafety professional develops and participates in programs to promote safe microbiological practices, procedures, and proper use of containment equipment and facilities; stimulates responsible activities among workers; and provides advice on laboratory design.



Who Conducts Biosafety?

Regardless of background and education, biosafety professionals must develop knowledge of the principles of epidemiology, disease transmission patterns, risk-assessment and risk management, disinfection and sterilization, disease prevention, aerobiology and environmental control. Biosafety professionals include:

- Microbiologists
- Industrial Hygienists
- Biologists
- Engineers
- Molecular Biologists
- Veterinarians
- Occupational Health Professionals
- Environmental Health Professionals
- Clinical Health Care Professionals
- Biosecurity Professionals

Where do Biosafety Professionals Work?

The field of biosafety includes a range of positions and environments. Biosafety professionals find positions in:

- Universities
- Hospitals
- Research facilities
- Pharmaceutical companies
- Military and government agencies
- Biotechnology industry

How do I Prepare for a Career in Biological Safety?

- Take microbiology courses at an accredited university, which may include courses in virology, medical or pathogenic microbiology, plant microbiology, and mycology
- Take additional courses in other areas such as molecular biology, biotechnology, regulatory law
- Join the American Biological Safety Association (ABSA)
- Participate fully in ABSA sponsored seminars
- Join local affiliates for networking opportunities



SM(NRCM) Criteria for Registration

Education and Experience:

1. Master's or Doctorate in a biological science, with 30 semester hours in microbiology and 4 years full-time, post-baccalaureate lab experience within the past 7 years; or
2. BS or BA in a biological science, with 20 semester hours in microbiology and 7 years of full-time post-baccalaureate lab experience in the past 10 years; or
3. BS or BA in a biological science and 10 years of full time post-baccalaureate lab experience in the past 15 years.

Application Process:

- Obtain original transcripts
- Obtain minimum of 2 references
- Submit NRCM application

Review Process:

- NRCM Office receives submittal and checks for completeness.
- The NRCM reviews and evaluates each candidate to ensure they meet the published criteria for experience and education
- NRCM prepares acceptance/disapproval letter and sends to candidate
- Applicant takes NRCM examination
- Successful candidates receive an NRCM certificate and letter

Note: SM(NRCM) is a lifelong certificate, Recertification is optional, but if not recertified the individual certification is listed as inactive. SM(NRCM) is not an ABSA designation.

CBSP Criteria for Registration

- Meet the NRCM criteria and pass the SM(NRCM) biosafety examination
- Upon successful completion of the NRCM examination, individuals may apply to ABSA for the designation of Certified Biological Safety Professional (CBSP)

Education and Experience:

- Master's degree or doctorate with 30 semester hours or 45 quarter hours in microbiology AND 4 years within the past 7 full-time, post-baccalaureate experience as a professional with at least 50% time spent in biosafety program management
- Bachelor's degree (BS or BA) with 20 semester hours or 30 quarter hours of microbiology AND 7 years within the past 10 full-time, post-baccalaureate experience as a professional with at least 50% time spent in biosafety program management
- Bachelor's degree (BS or BA) with 6 semester hours or 9 quarter hours of microbiology* AND 15 years within the past 20 full-time, post-baccalaureate experience as a professional with at least 50% time spent in biosafety program management

**One course (minimum 3 semester hours or 4 quarter hours) is required to be entitled "Microbiology," "Pathogenic Microbiology," or "Medical Microbiology," while the other credits may be earned from courses under the general rubric of microbiology as accepted by the NRCM.*

Note: CBSP requires recertification every 5 years. CBSP is an ABSA designation

For additional information and resources on Biosafety, including requirements for RBP and CBSP contact:

American Biological Safety Association

1200 Allanson Road

Mundelein, IL 60060

866-425-1385

info@absa.org

www.absa.org



Professional Credentials in Biosafety



ABSA

American Biological Safety Association

Why Be Certified?

For years, the practitioners of biosafety have come from many different disciplines. Usually, it was determined that there was a need for someone to oversee the institution's biohazard operations. It was a position born out of necessity and was usually given over to either a senior research scientist with some background in microbiology or to the "Safety Guy" with no background in biological work. The field of biosafety has become defined and refined over the years. Research has become very complicated with rDNA work and highly infectious organisms, the threat of bioterrorism and emerging diseases. Many institutions now require that individuals overseeing biohazard and rDNA work be competent, educated, and have proper experience.



Certified Biological Safety Professional (CBSP)

A CBSP must meet specific educational and experience requirements and pass a written exam, developed by ABSA and administered by the National Registry of Certified Microbiologists (NRCM) through the American Society for Microbiology (ASM). Application requirements for the exam include transcripts, references, and work history. Certification is valuable for professional development. Recipients are internationally recognized as having sufficient knowledge and experience to qualify as a Specialist Microbiologist in Biological Safety in Microbiology (NRCM SM-NRCM). Passing the NRCM exam allows the successful candidate to apply to ABSA for CBSP status.

Registered Biosafety Professional (RBP)

A RBP is an individual with documented university education or specialized training in relevant biological safety disciplines and found to be eligible for registration by the ABSA Registration Evaluation Board. Eligibility requirements include a minimum of 5 years of practical experience in biosafety, or a combination of education and directly related work experience. Applicants must document examples of work related knowledge, skills, and abilities in the field of biosafety. The RBP understands sufficient cell biology, pathogenic microbiology, molecular genetics, and concepts of infectious transmission to enable them to apply safeguards to work with biohazardous materials.

RBP Criteria for Registration

Education:

- Bachelor's degree in biology-related field (may substitute 96 months of directly related biosafety experience for BA degree- cannot then use this towards experience requirement)
- Some Microbiology related courses are required (e.g., Gen. Microbiology, Epidemiology, Pathogenic Microbiology, Molecular Biology)

Experience:

- Five (5) years biosafety experience managing a comprehensive biosafety program
- MA or MS in relevant field (microbiology, biology) counts for 2 years towards 5 year requirement.
- Ph.D. in relevant field (microbiology, biology) counts for 3 years towards 5 year requirement
- Cannot combine degrees to account for more than 3 years towards experience

Application Process:

- Submit original transcripts
- Submit a minimum of 2 references
- Submit ABSA RBP application

Review Process:

- ABSA Office receives submissions and reviews for completeness
- Application packet reviewed by RBP Board (5 members)
- Review Board evaluates candidate application and votes (requires 4 yes votes for approval)
- Chair prepares approval/disapproval letter, sends to ABSA office
- ABSA Office prepares an ABSA letter for signature and prepares and sends out certificate for approvals to Chair for signature.
- Chair makes copies for records and mails (from ABSA Office) letters and certificates (for successful candidate)

Note: RBP requires Re-certification. RBP is an ABSA designation.