National Biosafety and **Biocontainment Training** Program (NBBTP)

Jessica McCormick-Ell, Ph.D., CBSP, RBP, SM(NRCM)

Director, Division of Occupational Health and Safety Program Director, NBBTP/IRTA National Institutes of Health





OFFICE OF RESEARCH SERVICES

Intramural Research Training Award (IRTA)





NH Mission







NIH National Institutes of Health

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To seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

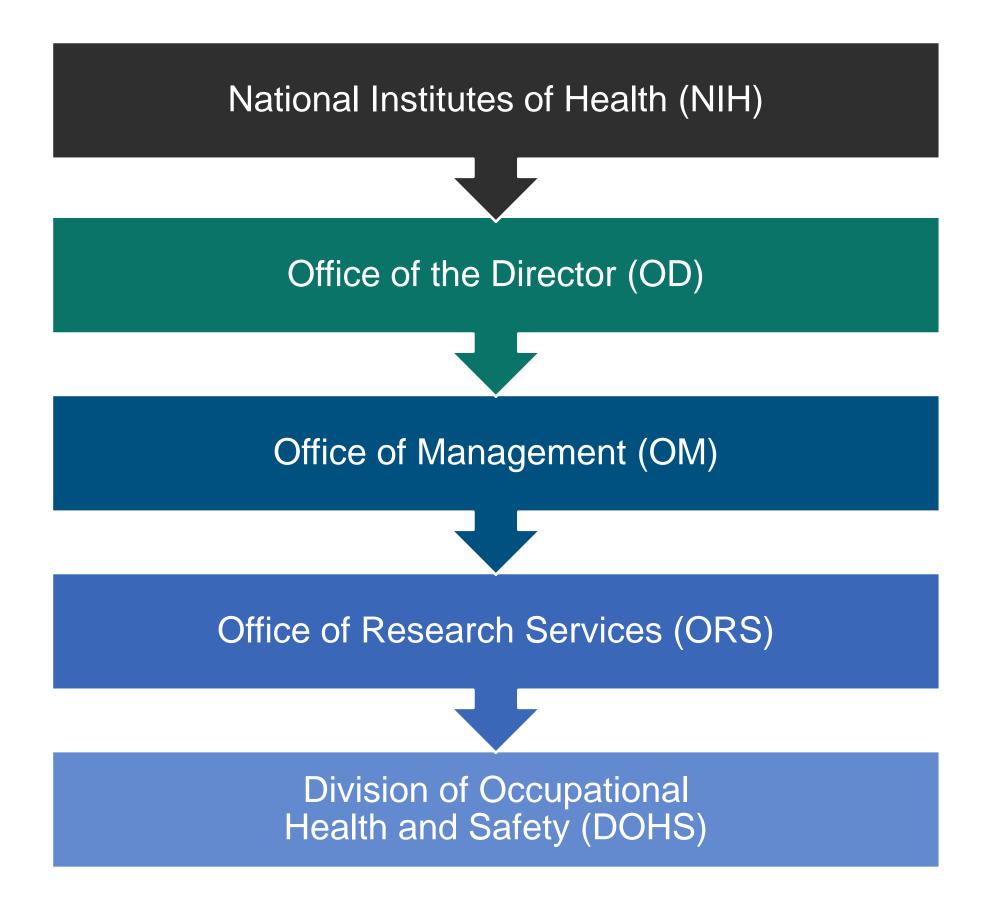


NH Organization

Where is DOHS situated within NIH?









NBBTP/IRTA Overview



Established in 2006



Two-year paid postbaccalaureate and postdoctoral fellowship in Bethesda, MD











DOHS & NIAID partnership





Mission: To develop biorisk professionals who can meet the unique needs of the biomedical, emerging disease, and civilian biodefense research communities through the 21st century.

Strategic intent: To graduate scientists capable of leading and directing biorisk management programs.



NBBTP/IRTA Leadership



Jessica McCormick-Ell, NBBTP/IRTA Program Director

Jessica McCormick-Ell has served as Director of the Division of Occupational Health and Safety (DOHS) at NIH since April 2020. As a senior advisor and subject matter expert to NIH leadership, Dr. McCormick-Ell oversees the Occupational Medical Service, Technical Assistance, Safety Operations and Support, Biorisk Management, and Community Health branches within DOHS. She also serves as Program Director for the National Biosafety and Biocontainment Training Program. In her tenure at NIH, Dr. McCormick-Ell has received numerous awards for her role in leading the NIH COVID-19 response. Prior to NIH, Dr. McCormick-Ell served as the University Biosafety Officer and Responsible Official at Rutgers, the State University of New Jersey. She holds a Ph.D. in Microbiology and Molecular Genetics from Rutgers University and is a Certified and Registered Biological Safety Professional and a Specialist Microbiologist in Biological Safety Microbiology.







NBBTP/IRTA Leadership



CAPT Derek Newcomer, NBBTP/IRTA Program Deputy Director

Captain Derek Newcomer is a Commissioned Officer with the US Public Health Service and serves as the Deputy Director for the National Institutes of Health's Division of Occupational Health and Safety as well as the National Biosafety and Biocontainment Training Program. Derek holds a BS in Environmental and Hazardous Materials Management, MS in Environmental Management from the University of Findlay, MS in Occupational Health from the Medical College of Ohio, and Doctor of Public Health from George Washington University. CAPT Newcomer's professional qualifications include Certified Industrial Hygienist and Certified Safety Professional.











NBBTP/IRTA Leadership

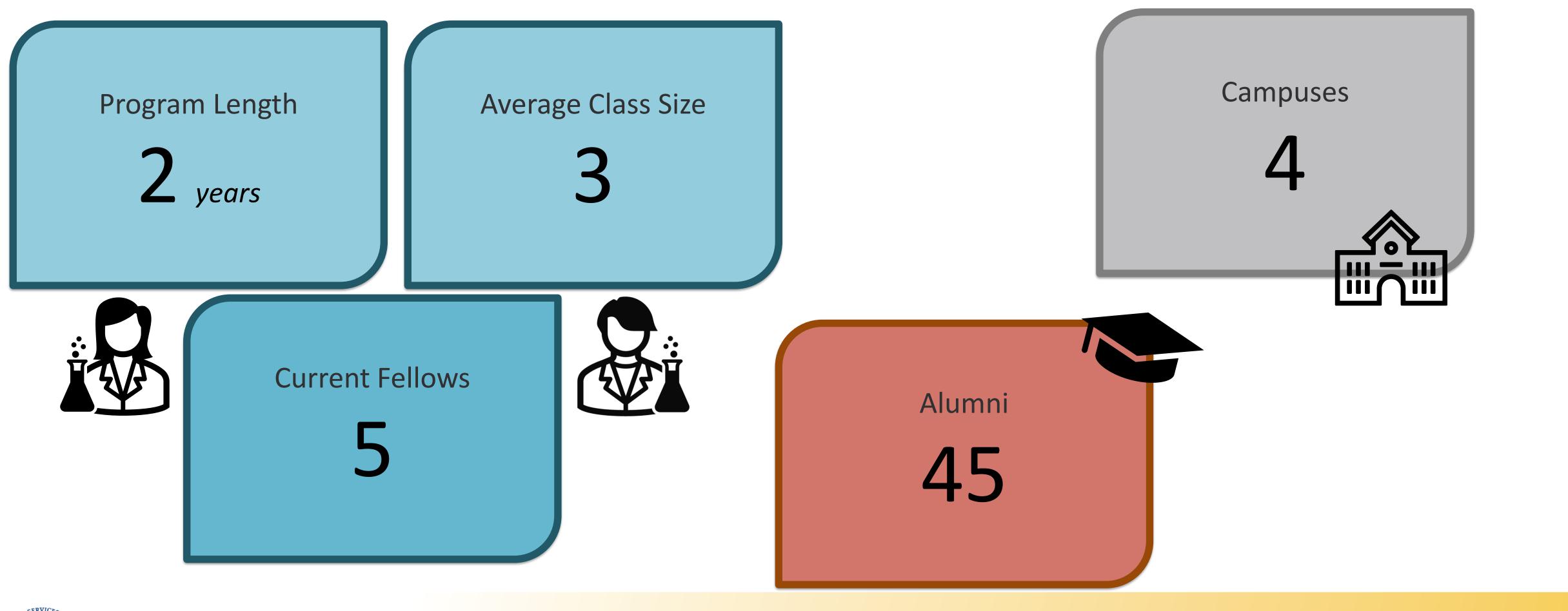
Adam Clarkson, NBBTP/IRTA Curriculum Program Lead

Adam Clarkson is a Certified Biological Safety Professional at the National Institutes of Health with 19 years of experience in biorisk management. He serves as the Curriculum Program Lead for the National Biosafety and Biocontainment Training Program. Adam considers himself fortunate to have known every NBBTP cohort since its founding and to have mentored biorisk professionals throughout his career. He has served as a microbiologist in the Laboratory Response Network, as a high-containment manager, IBC Executive Secretary, Associate Biological Safety Officer, and Select Agent Program Responsible Official. Adam holds an MPH from the Johns Hopkins Bloomberg School of Public Health and a BS in Biology from Mary Washington College.





NBBTP/IRTA at a Glance

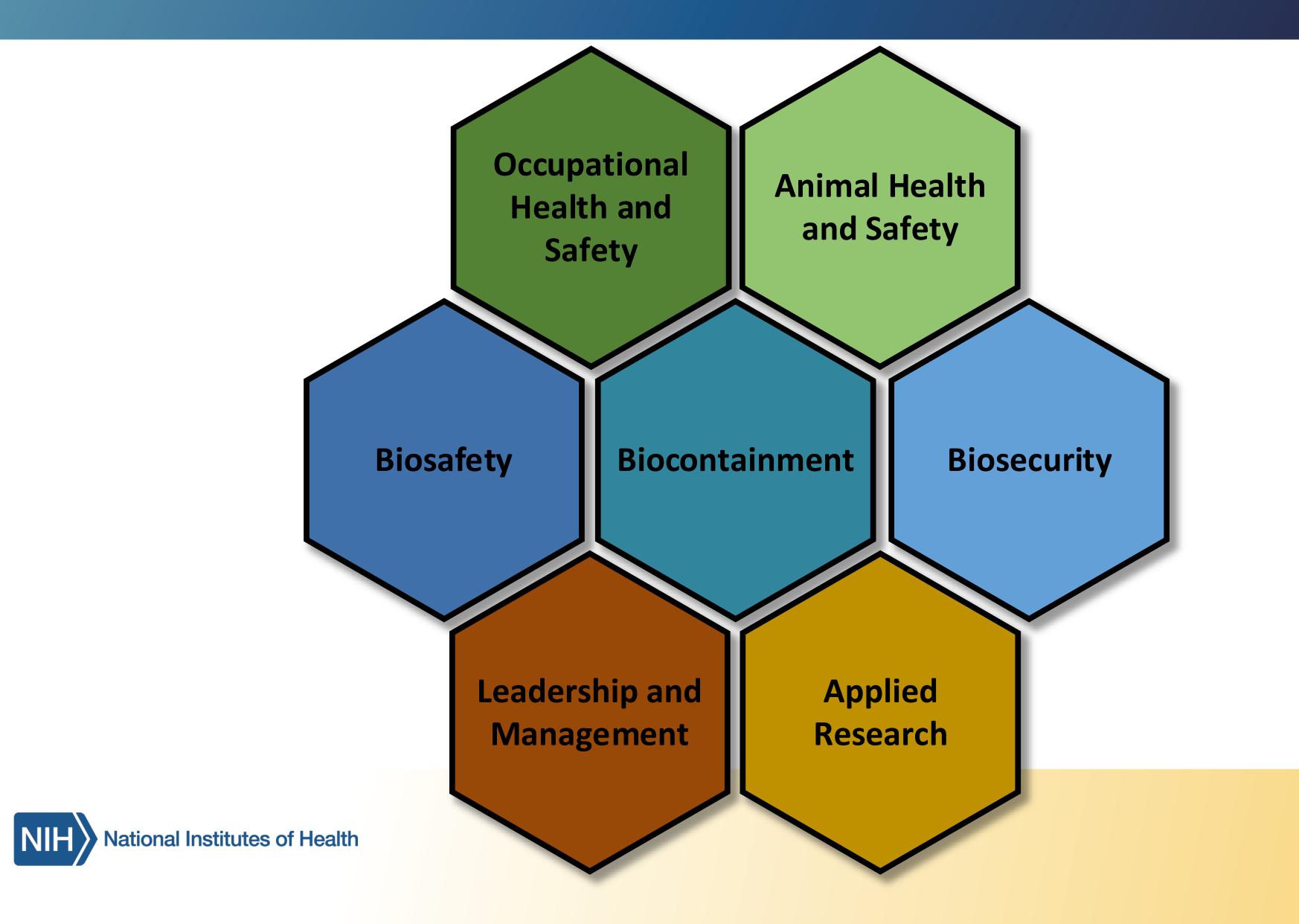








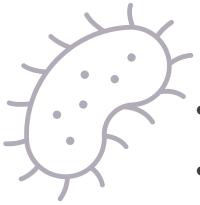
NBBTP/IRTA Core Program Elements







NBBTP/IRTA Topics

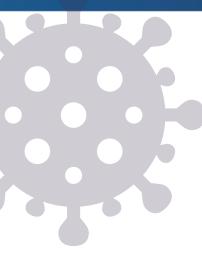


- Aerobiology
- **Animal Care and Use**
- **Applied Research**
- **Biocontainment**
- **Biosafety**
- **Biosurety**
- **Biorisk**
- **Chemical Hygiene**
- Communication
- **Decontamination**, **Disinfection**, and **Sterilization**
- **Emergency Management**
- **Engineering for the Biosafety Professional**
- **Geographic Information Systems**









- **Hazardous Materials Packaging**
- **HAZWOPER** Training
- **High-Containment Training**
- Import, Transfers, Exports
- Leadership
- **Maximum-Containment Training**
- Media
- **Occupational Health**
- Policy
- **Primary Barriers**
- **Problem-Solving**
- **Risk Assessment**
- **Select Agents and Toxins**
- **Technology Control**

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NBBTP/IRTA Curriculum: Year 1

Learn core subject matter relevant to the biorisk professional.

Trainings & Coursework

Learn basic biorisk elements in trainings ranging from less than an hour to a week or more.

Guided Activities

Participate in experiential learning through tours, hands-on application, field work, and projects.





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Year 1: Foundation

Conferences

Attend classes, learn best practices, explore subject matter, and network with colleagues.

Proposal

Explore biorisk topics and propose a question you would like to research.



NBBTP/IRTA Curriculum: Year 2

Year 2: Advancement

Trainings & Coursework

Customize your curriculum by combining advanced courses and electives.

Developmental Assignments

Solve real-life biorisk challenges by partnering with high-containment and maximum containment laboratories nationwide.

- Center.
- meetings.





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Conduct independent biorisk practice and research.

Independent Practice

• Gain experience providing dedicated safety oversight to an NIH Institute or

• Apply risk assessment and management strategies to facilitate Institutional **Biosafety Committee**

• Practice public speaking and training skills by teaching a safety course.

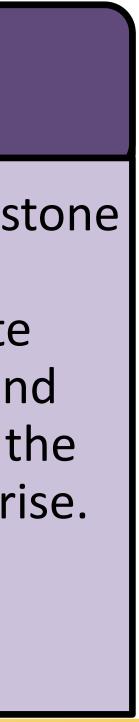
Conferences

Attend classes, learn best practices, explore subject matter, and network with colleagues.

Capstone

Complete a capstone project to demonstrate knowledge and contribute to the biorisk enterprise.





What sets this program apart?

Immersive, hands-on experience in biorisk man

Solid foundation in biorisk management trainin

NIH has broad and extensive research portfolio

Unparalleled access to biorisk management su

Opportunities to impact policy

Developmental Assignments and Capstone Pro

In-depth BSL-4 training and project opportuniti

Access to NIH OITE and NIAID resources

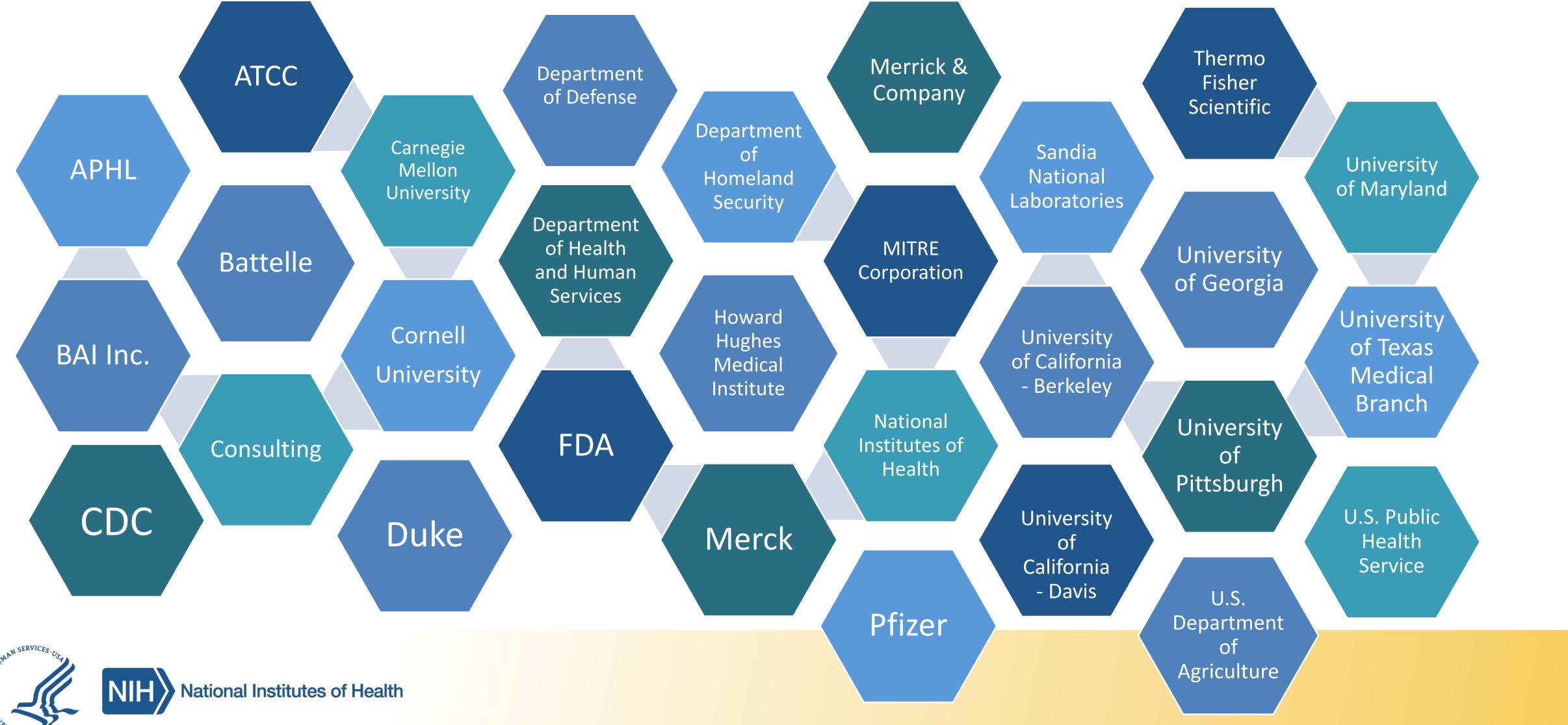




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Where do program graduates work?

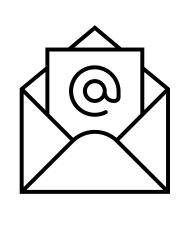




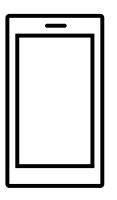


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Visit https://www.niaid.nih.gov/research/nbbtp-irta

