

ARNOLD 8 BIOSAFETY LABORATORY OVERVIEW

The Arnold 8 Biosafety Laboratory will enable the Tufts University School of Medicine, a world leader in infectious disease research, to develop innovative strategies to detect, prevent and treat many diseases that threaten human health worldwide. The research conducted in this laboratory can lead to new vaccines, antibiotics or other discoveries to prevent or treat infection.

The Laboratory Will Conduct Life-Saving Research

- ❖ The proposed Arnold 8 Biosafety Laboratory will enable Tufts medical researchers to find new treatments and cures for serious diseases such as tuberculosis that affect millions of people around the world. The laboratory will be located on part of the eighth floor of the Arnold Wing of the Biomedical Research and Public Health (BRPH) Building on Tufts' Boston health sciences campus, 136 Harrison Avenue, at the corner of Harrison Avenue and Kneeland Street.
- ❖ At 1,700 square feet, the laboratory will be about the size of a classroom and would represent less than 1 percent of the existing building's total space of 260,000 square feet.
- ❖ Tuberculosis (TB) will be the primary focus of the Arnold 8 Biosafety Laboratory's research. According to the World Health Organization, tuberculosis infects as much as a third of the world's population. In Boston, TB is approximately 20 times more common among Asians than Caucasians.
- ❖ As a biosafety level 3 (BSL-3) facility, the new lab will provide a fully regulated, safe and secure environment in which our researchers can study microorganisms that cause TB and other serious but treatable infectious diseases that can be transmitted to people who breathe air contaminated with those organisms. Such organisms can only be studied in a BSL-3 laboratory, which has the specialized air handling systems and other protective features to enable workers to study them safely, securely and effectively.
- ❖ Tufts University School of Medicine and its Department of Molecular Biology and Microbiology have been at the forefront of infectious disease research for decades. More than 40 years ago, the first chair of the department discovered how penicillin kills bacteria. More recently, we uncovered why HIV generates resistance to drugs so quickly, knowledge that is essential to how we treat HIV/AIDS today.
- ❖ Until now, our faculty have focused their research in areas that do not require a BSL-3 laboratory. Today, however, there is a growing and unmet need for research that requires a BSL-3 laboratory. For example, BSL-3 laboratories are needed to study a number of diseases that were previously under control but have re-emerged in more severe strains. Most other world-class microbiology departments already have BSL-3 laboratories. Without such a lab, School of Medicine researchers are increasingly limited in their ability to study serious infectious diseases.
- ❖ The Arnold 8 Biosafety Laboratory will help Dr. John Leong, M.D., Ph.D., the chair of the microbiology department, to recruit more top researchers in infectious disease and help current faculty to expand their research.

Safeguarding Our Employees and Our Neighbors Is Our Priority

- ❖ Safeguarding the health of our own employees and community members, as well as the environment, is of paramount importance.

- ❖ The Arnold 8 Biosafety Laboratory will be designed, built and operated to meet or exceed stringent standards to protect both the community and those who work in the lab.
- ❖ Before Tufts can receive approval from the Boston Public Health Commission (BPHC) to operate the lab, we will have to submit to the Commission detailed plans covering every aspect of the lab's design and operation. The Commission and Boston Fire Department will review those plans and thoroughly inspect the lab to make sure it will operate safely and securely. Only then can we receive a permit from the Commission to operate the laboratory.
- ❖ Similar BSL-3 laboratories currently operate safely at hospitals, universities and other locations in Boston, Massachusetts and across the country. The Boston Public Health Commission currently oversees permitting for 11 BSL-3 laboratories in the city of Boston including facilities at Boston University, Brigham & Women's Hospital, Children's Hospital, Dana Farber Cancer Institute, and Harvard University. BSL-3 laboratories are also located throughout Massachusetts, including two on Tufts' campus in Grafton.
- ❖ The Arnold 8 Biosafety Laboratory would be very different from the large biosafety facility built by Boston University. Boston University constructed a 192,000 square foot, standalone building that includes a BSL-4 laboratory to study the most dangerous infectious diseases for which no treatments exist. Tufts is planning a 1,700 square foot BSL-3 laboratory in an existing building that will study important infectious diseases, such as tuberculosis, which are treatable but for which new treatments are needed. Tufts will not pursue a BSL-4 laboratory.

We Want to Work with the Community

- ❖ We are committed to working very closely with the local community, including our Chinatown neighbors, and the city of Boston during planning and development of the proposed facility and throughout its operation.
- ❖ We are creating a Community Advisory Committee, which will represent a cross-section of the community. Through this committee we will share information about the proposed project and receive feedback so that we can address any questions or concerns. To ensure that residents are informed about our plans and to provide an opportunity for the community to ask questions and obtain more information, we are planning to meet with community organizations such as the Chinatown Residents' Association, Neighborhood Council, CCBA, Safety Committee and Chinatown Coalition. We will be happy to meet with additional groups that are interested in learning more about the project.

More information on the proposed lab is available on the project website at medicine.tufts.edu/Research/Arnold8BiosafetyLab or from our Community Relations office, telephone: 617-627-3780 or by email: communityrelations@tufts.edu. We welcome your input.