

Members of the Committee. Thank you for the opportunity to share my views on the need for legislation to assure safe and appropriate siting of laboratories with high containment facilities.

My name is David Ozonoff. I am a physician and have spent almost 40 years in medicine and public health. I am also a Professor of Environmental Health at Boston University School of Public Health and for 26 years chaired the Department of Environmental Health there. My scientific specialty is in environmental epidemiology, especially the study of disease clusters.

As a public health physician, I am not opposed to BSL4 laboratories but I believe for reasons of public health appropriate foresight and prudence should be applied whenever they are located, built and operated. Such foresight and prudence in traditional public health has always meant explicit and agreed upon standards and appropriate and effective public oversight. I speak in favor of Representative Fox's bill because I believe it provides those two essential elements.

The problem of emerging infectious disease and the current driver of these facilities, biodefense, is a complicated subject but let me highlight those elements of special importance and relevance to this Bill. This facility will pursue an as yet unknown and unannounced research agenda and we can argue whether it will eventually be one that truly serves a public health agenda.

Regardless of that fact, which is not unimportant, when I considered this facility, which will be located across the street from my office, like many others, I was shocked to discover there were no siting regulations or independent oversight laws or regulations governing them, not only here in Massachusetts, but anywhere in the nation. Much of this has to do with the newness of the subject matter, but this is still a grievous gap in reasonable and prudent public health protection. There is essentially nothing to prevent siting of such a laboratory anywhere in the Commonwealth, say by some small start-up biotech company who have a research contract from the Department of Homeland Security or Defense to work on Ebola or Marburg virus and who find your district an especially nice place to take up their activities. Perhaps many cities and towns have appropriate sites, but it is easy to imagine as many more inappropriate ones. At the moment, there is nothing specifically to prevent this. While we have standards for facilities as varied as nuclear plants and septic systems, we don't have them for laboratories of this kind. Legislation needs to catch up with the capabilities of modern science, and this Bill is an appropriate way to do this.

The issues here are as serious, perhaps more so, as the siting of nuclear facilities or chemical plants. Chemicals may be very harmful but they are primarily harmful to those in the immediate environment. Unlike chemicals, infectious organisms reproduce themselves and travel on social networks, not wind currents. Thus matters of safety and health are of prime concern because they can affect so many more people and at greater distance. What happens at the BU lab can well affect anyone in the Commonwealth, indeed anyone in the nation or elsewhere. Moreover, the BU lab is just one species of a type of facility that will become more common so it is reasonable to think ahead, which this Bill does.

Others will recount the abundant evidence that there are real, not theoretical dangers related to these facilities. While as a public health physician I feel strongly we need to research these matters as many lives might depend on it, for the same reason I feel strongly the research must be treated with the utmost respect and care. Allowing such facilities to be sited without any

preparatory evaluation and operated without independent oversight seems imprudent at best and foolhardy and negligent at worst.

We will probably here that reasonable and prudent safeguards will kill research. I hope you will pardon my weariness and cynicism at this. I have been hearing this throughout my career, not only from scientists but from chemical companies, banks and any other regulated community. Nobody likes to be regulated. But we all live with it for the sake of the good of the community. Nothing in this Bill will stop research in Boston or anywhere else in the Commonwealth, any more than Cambridge's recombinant DNA regulations of the 1970s stopped cutting edge research in molecular biology at Harvard and MIT.

Agents of epidemic disease have emerged from research laboratories in the past. The 1977 pandemic with H1N1 influenza is thought by most to be such an example. With our new capabilities to produce new and dangerous pathogens and the increased pressures and incentives to work on them, we are entering new and very complicated territory. This Bill is a small, prudent step. It will present no added burdens to the scientists since it doesn't ask them to do anything they weren't pledged to do anyway. And it will begin to bring the uncontrolled spread and placement of facilities of this type under some kind of reasonable and rational control and oversight.

Thank you for your attention.