## Jane Hollingsworth's Testimony 8/17/16 House Republican and Democratic Policy Committees Hearing

Good morning, Chairman Benninghoff and Chairman Sturla, and members of the Republican and Democratic House Policy Committees. I very much appreciate your interest in the life sciences sector in Pennsylvania and I am delighted to be here to share my story, experiences and insights with you this morning.

My name is Jane Hollingsworth and I am the Co-founder and Managing Partner of Militia Hill Ventures and Chief Executive Officer of Immunome, Inc, a cancer immunotherapy company based here in University City.

I began my career in life sciences in a slightly unorthodox way. I am a business person and a lawyer, not a scientist. I practiced law for a number of years at one of the large Philadelphia law firms but always had an interest on the business side and an entrepreneurial bent. I left the big firm in 1994 to work as general counsel for IBAH, a clinical research organization, or "CRO". For those of you that do not know, a CRO provides clinical trial and other services to the pharmaceutical and biotech industries. It is a service business, not taking the risk of developing its own products. I gradually took on other senior management roles at IBAH until we sold that business in 1999.

At that point, I had the bug so the founder of the CRO and I started our own pharmaceutical company, Auxilium Pharmaceuticals. We decided to focus on urology therapeutics with the idea that a small company could thrive in that therapeutic area because it was not yet dominated by larger pharmaceutical companies. We successfully raised venture capital, took our first product from idea to approval by the FDA in 22 months – a speed record that will likely never be broken – built the commercial organization, launched our first product, took the company public and employed hundreds of people.

After Auxilium took off, my co-founder and I decided to start and build a company in the field of neurology, Nupathe Pharmaceuticals. NuPathe was also funded with venture capital, went public and had a similar trajectory to Auxilium. Both companies have since been sold to other pharmaceutical companies, one to Teva and one to Endo Pharmaceuticals – not an unusual outcome for successful young companies that start from nothing, take the risk and successfully develop products needed by patients.

At the time we started Auxilium in 1999, capital was tight for life sciences companies. We were able to raise our first capital from SCP Partners and to tap venture capital from New York, Boston and London. When we started NuPathe in 2005 capital was also tight However, the Pennsylvania tobacco funding had just been instituted. As a result, we were able to obtain early stage capital from BioAdvance, Ben Franklin and others. That early funding allowed us to obtain data on our first product that led to larger venture capital funding led by Quaker Partners. Without BioAdvance, I am not sure that we would have succeeded in starting and building that company.

After NuPathe I began to focus more on the state of the life sciences sector in Pennsylvania and I did not like what I saw. The number of new companies was down, the amount of venture capital that was resident in this area was down, the percent of venture capital investment that this area was attracting was very small compared to other parts of the country. The jobs, money and talent were leaving for Boston and people like me, recently out of a company that had been sold, were increasingly being recruited to go work in Boston. I know many people in this position that have either moved to Boston or are commuting to a job there because there were insufficient life sciences jobs here or they could not get the capital here to start their own company.

I was not interested in moving to Boston and so rather than listen to more lamenting about the situation, I decided to do something about it. That is when I started Militia Hill Ventures with my partner Joan Lau, an ex-Merck scientist, turned entrepreneur. The reason we started it was to actively create what we all know we want – a thriving life sciences sector in this area.

Boston became a life sciences powerhouse because people decided to actively work to make it one. What did they do?

Boston created a strong physical core (in Cambridge) so that investors, company
founders and employees, academic founders, critical experts and service providers
would all see each other, get to know each other, interact with each other on an
informal and formal basis and generally create a community that made it easier
for the key ingredients of talent, capital and assets to come together to form and
grow strong companies.

We located Militia Hill Ventures in University City to help build our own core and community here. We already have the universities, the Science Center, easy transportation access by train and air and a growing vibrancy around this core that is helping to make that dream a reality. It is starting to happen.

The Militia Hill space provides collaborative, flexible work space for early stage companies, a place to work side by side with investors, patent experts and others working to build their own companies and a source of mentorship for the next generation of entrepreneurs. We at Militia Hill spend a lot of time working with and mentoring the next generation of talent that exists in this region. Any resources or incentives that the state can provide to support the effort of finding and mentoring these budding entrepreneurs would be very meaningful. For example, we are in discussions with one of the universities in the area that wants to provide its PhD candidates with the opportunity to learn about and work in the early stage companies that we and others are building. It will help to provide a path for the students and a source of talent for our companies.

2. Boston has many sources of capital that are resident in Boston – a major advantage for starting new companies. Moreover, Massachusetts provided a lot of state money to the industry in various forms. I know that Pennsylvania has its

fiscal challenges but no company and no entrepreneur, no matter how great, can succeed without capital. The Pennsylvania greenhouses, particularly BioAdvance, the one with which I am most familiar, has made a big difference in the ability of our region to start and grow new companies. As mentioned, if not for BioAdvance, we may not have succeeded with NuPathe. Every single thing that we can do to make funding available or easier to acquire for life sciences companies is critically important to the survival and growth of this sector.

At Militia Hill we spent the first two years of our existence working to bring capital to this region by raising regional and national funds that will reside here and invest in companies here. It is a work in process still. The success of any and all programs at the state level that encourage or leverage the investment of other capital into companies here is hugely important to our ability to bring in more outside capital.

3. The large venture funds that invest in early stage life sciences companies are more and more building their own companies, putting the assets (typically from universities), capital and talent together to launch those companies themselves. Naturally, they launch them where they are – many in Boston. This system has the effect of constantly refreshing the crop of high growth, high quality companies as the more mature companies are bought, merge or disappear.

For this reason, we are actively building companies at Militia Hill Ventures as well. We have a wealth of talent in this region from the pharmaceutical industry and most of them do not want to leave. We also have a wealth of young talent from our university systems that increasingly want to work here. That is a huge strength of ours. We also have great research at our universities but some have not always been easy to work with. We need to find ways to allow better working relationships between industry and our academic institutions to provide an easier path for technology transfer into start up companies. Any incentives that could be put in place for universities to translate their research out into companies would be helpful in this process.

I am optimistic that we are on the right path with our efforts to start and grow more companies in this area. We need to build on this momentum with every new program and incentive that we can muster so that the progress continues. Thank you.

