

JETRO & CIC: Insights Into Massachusetts' Startup Ecosystem
Issue #4
Featuring: MassBio

Introduction by CIC Japan Desk

The CIC Japan Desk had the wonderful opportunity to speak with Ben Bradford, Head of External Affairs at MassBio, and learn more about his perspective on the whole of the Massachusetts Biotech ecosystem. MassBio is a nonprofit that works closely with Boston-area leaders, as well as Massachusetts state representative cabinets, in order to help accelerate the pace of progress for Massachusetts biotech companies. They aim to benefit the patients that rely on Biotech innovation by supporting the creation of programs and funding at a local and state level. MassBio is now also focusing on education programs to help fill the need for biotech workers, while simultaneously providing historically underrepresented groups with an opportunity to make generational change.

MassBio is located at 700 Technology Square within Kendall Square, called “the most innovative square mile on the planet.” In this article, we will cover MassBio’s history, their influence on Biotech in Kendall Square, and what they are doing to help make life better for Massachusetts residents. We will also cover MassBio’s involvement with international entities, including those from Japan and how they plan on cooperating with them more in the near future.



Ben Bradford

Head of External Affairs

MassBio

Ben, please introduce yourself and your role at MassBio.

My name is Ben Bradford. I am head of External Affairs here at MassBio. My role covers economic development, partnering with municipalities here in Massachusetts, and also working with international governments, international delegations, and companies from around the world to ensure that they can effectively interact with the Massachusetts ecosystem. I also oversee our communications and work closely with our Government Affairs team. Previously I worked in Membership, so I understand how companies can benefit from participating in MassBio.

In your own words, what is MassBio?

MassBio is an organization that was created to support the needs of the biopharma industry here in Massachusetts. It started with six companies who were seeing each other at Cambridge City Council meetings, and they hired a joint lobbyist to make sure that nothing adversely affected them at those council meetings. That has grown into an organization that represents over 1600 companies and nonprofits throughout Massachusetts, the US, and beyond. Our core support mechanisms are advocacy at a municipal, state, and federal level, as well as pre-negotiated pricing for group purchases on behalf of our members with key vendors in the industry. This ranges from lab supplies, to gasses, to office supplies, and more. We also operate as a convener of large pharma and small biotechs, law firms and the venture capital community, and ensure that early stage innovation has a front row seat to the companies that know how to commercialize it. We make sure that those companies skilled in commercialization have a front

row seat to the early stage innovation that is happening here in Cambridge, Boston, Worcester at our academic institutions in Massachusetts and beyond.

With MassBio so interconnected with the state of Massachusetts, could you explain more about the value of the state connection to your members?

I believe that the Massachusetts life sciences ecosystem has grown to what it is today thanks to the partnership between industry, government, and academia. In that triad, MassBio represents the industry component. We have worked closely with all four of the past gubernatorial administrations to ensure that the government supports this industry in Massachusetts. We have a great landscape of academic institutions and early stage innovation here in Massachusetts and we have the hospitals with research happening in them as well. But support from the government has really allowed this industry to flourish here, which I have shared with many international delegations. For example, we had the Governor of Fukuoka visit MassBio. I mentioned that Massachusetts has had the luxury of all of the last four of our governors supporting this industry. We would love to see this collaboration more at a national level and also internationally.

Republican Governor Mitt Romney filed the Life Sciences Initiative in 2006-07, as the economy was in decline. Democratic Governor Deval Patrick put \$1 billion into this industry over the course of 10 years. After he left office and Republican Governor Charlie Baker took over, he reauthorized the Life Sciences Initiative. And certainly you could see a world in which a Republican governor saw a Democratic Governor's successful project and chose not to reauthorize it. However, that's not what Governor Baker did. He doubled down and reauthorized the Life Sciences Initiative for another five years at over \$600 million. And this June Democratic Governor Maura Healey announced that she would be reauthorizing the Life Sciences Initiative again. We are working closely with her team and the legislature to figure out what those components of that program look like and what that reauthorization looks like, including tax incentives for companies that are adding jobs, early stage funding for innovators and founders, and infrastructure dollars for our non-profits and municipalities here in Massachusetts. There is a lot of opportunity here and we look forward to continuing to work with our partners in government at the administrative level and the legislature and at the quasi-public level with the Massachusetts Life Sciences Center, who is the quasi-public agency that operates the fund that the Governor is going to reauthorize.

MassBio's mandate is to represent our members and industry. Their job is to make sure that Massachusetts is the best place in the world and maintains its status as the best place in the world for our members and industry to do business. So there is a lot of overlap between the MLSC and MassBio, but there are times that we have different initiatives as well.

Could you tell us MassBio's origin story?

MassBio is the first biotech trade association in the world, and it was for the public policy support I mentioned. The City of Cambridge or the Cambridge City Council was apprehensive about giving access to the public water supplies to companies that were doing genetic engineering. It was not even called biotech back then. And that is why MassBio was created to support companies gain access to the public water supplies, which we know is integral to the success of companies in this industry.

Could you provide some other examples of MassBio's role in the local ecosystem?

When the Life Sciences Initiative was originally created back in 2008, Massachusetts had only one of the top 20 global pharmaceutical companies, and though it changes from time to time, we regularly say that now, 18 of the top 20 global pharmaceutical companies have a physical presence here in Massachusetts. Part of this was done by our partners in state government offering and recruiting companies, but part of it was done by MassBio in making sure that our companies understood the value of external innovation. And that's something that was not happening 20 years ago. Large pharmaceutical companies had their own campuses, they were behind closed doors with significant programs with high throughput screening but they were all facing a patent cliff and they were not producing enough innovation to be sustainable. So MassBio created programs like our "Pharma Day" where we connect early stage companies with large pharmaceutical companies and they have one-on-one meetings with each other.

And those early stage companies can be from anywhere in the world, not just in Massachusetts. We encourage companies from around the world to apply for those one-on-one meetings because something we know is that Massachusetts has great research and development and innovation but it is certainly not exclusive to Massachusetts. We want to make sure that we are providing opportunities for great science to be advanced regardless of where that great science is. One of the things that MassBio has done is enhance that external innovation machine that a lot of our large companies here in Massachusetts take part in. Many of those companies that have physical presences here started with their BD teams coming to Massachusetts and having innovation centers here. And that's something that has grown into research and development operations and for some of those companies manufacturing. So we've really helped enhance the entire trajectory of the industry here in Massachusetts.

Just recently, MassBio played a great role with our partners in government and in the nonprofit world in applying to have ARPA-H be located here in Massachusetts. We help showcase what Massachusetts has to offer. They chose Massachusetts for a reason, and MassBio really tries to accelerate those reasons. Another thing that we have done is we have created a program that rates municipalities on their ability to be a good partner for industry. It is called our

BioReady Communities Program, and it allows companies and developers to know which cities and towns have the public infrastructure and have the public support to house life sciences companies. We have been able to amplify that program and out of the 351 cities and towns here in Massachusetts, we've rated over 100 of them. Using our data, we see our member companies flocking to the cities and towns that are the highest rated.

About two years ago, MassBio saw a trend amongst our members where the competitiveness of the workforce was a challenge. We did a deep dive, and we created a report that stated we were going to need 40,000 net new workers in the next handful of years but we were not sure where those workers could come from. So, MassBio created a workforce development program that will be launching in January, 2024 called "Bioversity," with the goal of educating people with a high school degree, not a four year degree, and short-term training programs to ensure that they are able to get jobs in the life sciences industry here in Massachusetts. We know that these are jobs that can make generational change. This is going to give individuals who have been underrepresented in our industry an opportunity to make real change in their lives, while also supporting an industry that needs the influx of talent and workforce here in Massachusetts.

That's a lot of programs. You mentioned three already, but in total, how would you quantify the number of programs at MassBio?

We have our policy initiatives at a state and a federal level. We have our innovation programming called "Partner Day" and our accelerator program called "MassBio Drive." Then we have the purchasing program that I referenced that's available to all of our members. So I think in any given year, our programming ranges from six to ten initiatives that we are really focused on. We are a small team, so we have to be nimble. One thing we are focused on right now is diversity, equity, and inclusion, and ensuring that is part of the "Biodiversity" Program, ensuring underrepresented populations have an opportunity to work in this industry as well.

Which of MassBio's services are best suited to assist internationally based companies with a desire to relocate or expand to Massachusetts?

I think "Membership" is a great place to start. If they are ready to commit to Massachusetts, we have a career page, and we can help them build out their lab locally. Our economic development support can put them in touch with the right real estate companies. We can help them navigate the government grant programs at a state level. But if they are looking to dip their foot into Massachusetts and test out what the state has to offer, I think our "Pharma Day" Program is an outstanding opportunity for that. In the last 12-18 months, we have had both Daiichi Sankyo and Otsuka do a "Pharma Day." Despite having no presence here in

Massachusetts, they have utilized the tools that we have here so that they can do that external innovation that I was referencing earlier.

MassBio's events catalog is quite extensive, even just looking at 2023. Are there any events that the international community is particularly drawn to? Would you have any recommendations?

In the early spring we do our annual meeting, which is called the *State of Possible Conference*, where we have panel discussions, keynote speakers, really talking about what's possible here in Massachusetts. That is a great place for someone to learn and connect with what is happening here. In conjunction with that event, we will have our *Align Summit*. This is for early stage innovators to present to investors and pharma companies alike. They would have to apply to be one of the companies that are selected but could attend as well. And this is where, whether it is venture capital or corporate venture from Japan, could also come and learn about companies from Massachusetts that they may want to invest in. We have some fun events as well. These are membership only events, but every quarter we have a large networking event.

Come have a few free drinks on Mass Bio and get to know the ecosystem at our St. Patrick's Day event, our summer mixer, Oktoberfest, and then a holiday party. And then this year, we're launching MassBio's first ever "International Day," where we and the Netherlands Foreign Investment Agency and Innovation Netherlands are hosting an event altogether to highlight early stage innovators from the Netherlands, and then a panel discussion about the ecosystem in the Netherlands as well. And I think that this is where potentially we could work with, whether it's JETRO or the Japanese Biopharma Association, on doing something kind of similar. The idea here is it's the inverse of our "Partner Day," where it's not large pharma looking at early stage companies for one-on-ones, it's early stage companies pitching and the audience will be a number of different venture arms and large company BD folks. So we look forward to having the first one and having a handful next year as well with countries around the world.

Would you be interested in a Japan-themed international Day then?

I think we would be foolish not to. Part of navigating this is finding ecosystems that have something to bring to Massachusetts and because Massachusetts is, and I may sound arrogant saying this, the best place in the world for research and development. There is a limited number of different ecosystems that add value to what Massachusetts does and certainly the Japanese life sciences ecosystems is one of those. I think that Japan's on a short list of countries with which we would be interested in doing something like that.

Just one last question from me. How does MassBio define what an early-stage startup is? Would it be just at the proof of concept stage?

For our “MassBio Drive” Program, we define early stage companies as pre-series A — less than \$2 million raised. When we talk about our “Partner Day,” those are the sort of companies that are pre-commercial and maybe want to be acquired. For our “International Day,” I think the goal is to highlight companies that have at least a few products and programs in development so that they are a potential partner for someone here in Massachusetts or an investor. We do not differentiate too much and we welcome all comers and are happy to help in any way we can.