MassBio®

Insider

Summer 2021

An Inside Look at the #1 Life Sciences Cluster

Introducing MassBio *Hub*

All-Inclusive Event Packages for MassBio Members

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Summer 2021

I Am Truly in Awe of How Far We Have Come

As we reflect on the first six months of 2021, I am truly in awe of how far we've come. The COVID-19 pandemic has challenged people around the world in unimaginable ways. But our industry stepped up to tackle these challenges and address the greatest global health crisis of our time. To all the MassBio members who shifted operations and joined the fight against the pandemic – thank you. It is because of you that Massachusetts is the best place in the world for the life sciences and for patients.

The life sciences' swift response to the pandemic put our industry in the spotlight and generated enormous confidence in the industry's ability to save patient lives. As a result, the Massachusetts biopharma industry experienced its best funding year on record, reaching an incredible $5.8 billion in venture capital investment. Not only has the industry reached new highs, but MassBio is evolving in lock-step to meet our members' evolving needs and the future is brighter than ever.

For the first time in nearly 15 months, we've returned to some semblance of normalcy. As a result, we are enormously proud to offer our members access to the MassBio*Hub* conference and business center at below-market rates so they can once again meet in-person to connect and catalyze innovation in the heart of Kendall Square. The return of our highly sought-after in-person networking events is on the horizon and will be organized in a way that allows our membership to feel confident in the safety of these events and in the ability to convene away from the computer screen. We're also working to shift our content-based events—from professional development forums to our premier conferences – back to an in-person and/or hybrid format and we cannot wait to show you what we have prepared.

We began this year with our first-ever Partnering Week to connect early-stage innovators with world-leading biopharma companies for potential partnership opportunities. Facilitating more than 600 direct connections between representatives from across the globe, we built on the success of this event to deliver the State of Partnering week in May, and we are continuing to find new ways to support and engage with Massachusetts' startup ecosystem.

We are also working to advance equity, diversity, and inclusion in the life sciences by creating new resources and meeting with members one-on-one to ensure they have the support they need to develop robust ED&I initiatives and attract and retain diverse talent.

Thank you for all you've done and for all you continue to do for patients, the life sciences, and Massachusetts—we would not be where we are today without your hard work and dedication. I look forward to meeting with you all in-person once again.

words of welcome

Kendalle Burlin O'Connell Esq., President & COO, MassBio

MassBio

Upcoming events

ED&I Conference
July 15, 2021

Patient Advocacy Summit
September 30, 2021

Digital Health Impact
November 4, 2021

Creating an Inclusive and Equitable Work Environment Post-COVID

By Zach Stanley, Executive Vice President, MassBio

Life sciences companies have faced myriad challenges over the last 14 months trying to manage staffing and operational challenges throughout the COVID-19 pandemic: what positions can work remotely vs. who must work in-person; how to effectively integrate new hires onto a remote team; how to best conduct clinical trials, investor, and partnering meetings virtually—to name just a few. Many of these challenges were unique to the life sciences, primarily because of the need for so many employees to continue to work on-site in labs and manufacturing facilities.

Now, after all state-level COVID restrictions were lifted in Massachusetts on May 29, every company has been rushing to implement a new set of protocols outlining the rules and regulations for a return to office. Some of these decisions are compliance-and legal-based regarding vaccination and masking requirements. Some are more operational to ensure a fully functioning business. But many seek to establish a new company culture through the creation of new and updated hybrid and remote working policies. Determining what these policies will be is not straightforward, but we know these policies will have an impact on a company's culture, including how employees view and experience inclusion and equity.

Going forward, continued remote and hybrid work can have a significant impact on inclusive culture just as it did throughout the pandemic. When establishing new policies about when and where employees are expected to

work, companies should be focusing on inclusion, setting policies that are intentional about making all employees feel part of the team regardless of where they are working. Employees want to believe their ideas are heard and their actions seen. They want to feel a sense of belonging, and different populations will have different desires. These are not new concepts, but with a long-term view of many employees working remotely all or some of the time, creating and maintaining an inclusive culture will be a bigger challenge.

A similar dynamic is at play when approaching equity and hybrid work environments. Managers must carefully consider a range of issues to ensure their direct reports are treated equitably, including such things as how to provide employees access to professional development, network building opportunities, and career advancement. There are also equality considerations especially around performance reviews and ensuring managers are evaluating all employees in the same manner no matter if they are predominantly on-site or working remotely.

To that end, companies should look carefully at the decision-making process for new hybrid/remote work policies and consider setting up a special committee to form, assess, and update policies, as necessary. This process should ensure that a broad range of stakeholders from the company have a chance to provide input including a diverse range of employees and positions. Companies could also choose to integrate discussion about this topic into existing ED&I related committees or company employee resource groups (ERGs). In addition, employee feedback will be critical once these policies are put in place. Employee engagement surveys can be expanded to seek feedback about both ED&I related issues directly and about how employees think remote/hybrid work is impacting company culture.

Done right, these new policies will increase equity and inclusion at life sciences companies. They may even give companies a competitive advantage and allow them to diversify their staff more easily by hiring remote workers from non-local candidate pools. ■

Partnering to Advance Member Savings & Incentives

By Jason Cordeiro, Vice President of Business Operations, MassBio

For more than a decade, MassBio and Thermo Fisher Scientific have partnered to provide members with more than $1 billion in savings. We have strived to alleviate monetary spend and administrative burdens faced by our members so they can focus on what they do best—improving patient lives.

To build on this success and deliver even more value, we are excited to share that MassBio signed a 10-year contract extension with Thermo Fisher Scientific to support the MassBio*Edge*, MassBio's savings and rewards program, and provide MassBio members and New England ***Edge*** affiliates premier access to industry-leading laboratory equipment, chemicals, and supplies at competitive discounts through 2030. Through this partnership, we can ensure that even the smallest biotechs—which are the backbone of the Massachusetts life sciences cluster—will have access to the set of tools, resources, and services that they need to develop breakthrough innovations.

In addition to monetary savings, MassBio and Thermo Fisher Scientific are pioneering a new supplier diversity initiative that is a first for the life sciences and a key component of MassBio's expanded equity, diversity, and inclusion (ED&I) initiative. Through the Fisher Scientific distribution channel, we have set a goal to increase the percentage of diverse supplier spend by 100% over the next two years, while also strengthening the presence of minority-owned businesses in the marketplace.

"We are honored to be the definitive source to supply MassBio and its consortium members with a compre-

hensive range of laboratory equipment, supplies, and safety-related products such as cleanroom and controlled-environment supplies and personal protective equipment," said Lisa Witte, President, Fisher Scientific channel, Thermo Fisher Scientific. "This contract extension helps us achieve our mission, to enable our customers to make the world healthier, cleaner, and safer by helping MassBio and its members achieve theirs."

Through this expanded partnership, MassBio's membership and New England *Edge* affiliates will have access to:

- $4 billion in projected monetary savings over the next 10 years, so members can reinvest in research and development
- Premier customer service, including a dedicated sales team to supplement and advance Thermo Fisher Scientific's team and the Unity Lab Services Program
- A 1% diverse supplier rebate incentive to MassBio members and New England *Edge* affiliates that purchase supplies and services through the Fisher Scientific distribution channel
- Safety incentive rebate for personal protective equipment (PPE)

To learn more contact Steve Powell at Steve.Powell@MassBio.org or visit Massbio.org/MassBio-Edge

Introducing

EdgeBenefits

An Exclusive Partnership Between MassBio and Harvard Pilgrim Health Care

The *Edge* Benefits program includes a comprehensive array of benefit offerings, including medical, dental, life and disability, vision, and voluntary plans—administered via a state-of-the-art benefit administration platform.

With *Edge* Benefits, MassBio member companies that qualify as large groups* can purchase quality health plans featuring a higher level of benefits and outstanding service at lower costs.

*This program is available to MassBio member companies that qualify as large groups (over 50 full time equivalent employees) and are fully-insured. Self-insured programs are also available.

MassBio®
Massachusetts Biotechnology Council

in collaboration with

Harvard Pilgrim Health Care

Plans deliver 5-10%
initial savings on premium, with potential for more in future years.

Health insurance products are underwritten by Harvard Pilgrim Health Care or its affiliate, HPHC Insurance Company.

In a Rapidly Growing Industry, Here's How We Can Ensure the Supply of Top Talent Meets the Demand

Karla Talanian,
Director of Talent & Workforce Development, MassBioEd

On June 2, MassBioEd hosted the 6th annual Life Sciences Workforce Conference. The program opened with a presentation of MassBioEd's 2021 Life Sciences Employment Outlook, which describes the state of the Massachusetts life sciences workforce, the search for talent, and specific challenges in recruitment and retention. Following this presentation, the Conference also included a discussion among several local biotech CEOs on the Future of the Workplace, exploring how a new paradigm of remote work and flexible schedules will impact the innovation culture this industry is known for. And we looked into the future with an analysis of real estate data to see how planned construction of new life sciences capacity will further increase the need for talent.

The 2021 Life Sciences Employment Outlook

Produced in collaboration with TEConomy Partners, this year's Life Sciences Employment Outlook is an in depth analysis of aggregate employment and hiring demand data, information on specifically what life sciences employers are looking for, and the forecast for new scientists entering the industry. Here are some highlights of the report:

- Currently the biopharma industry employs approximately 90,000 individuals in Massachusetts. This number represents a decade long growth rate of 67%, and 2019-20 growth of 4%. Both rates are substantially higher than that of the life sciences industry across the U.S., for which the 2010-2019 rate was 35% and the 2019-2020 rate 2%.

- Following these trends, we can expect an additional 20,000 jobs to be created over four years, with an expected total employment of 109,000 by the end of 2024.

- Massachusetts life sciences companies hire and employ an outsized percentage of highly educated

individuals, with 18% of jobs requiring at least a Ph.D., and 89% requiring at least a bachelor's degree. Nationally these numbers are 12% and 79%, respectively.

- Scientists, scientific managers, regulatory affairs professionals, data scientists, and manufacturing staff are all in high demand.

- Massachusetts tops the country in graduates with life sciences related degrees, especially at the doctoral level.

- Over the past four years, in Massachusetts there has been a 17% increase in Ph.D. conferrals in life sciences-related fields. Across the U.S., this increase has been essentially 0%. Since recruitment for these individuals is typically conducted on a national scale, this dearth of new talent is especially worrisome for an industry that relies on a highly skilled, hyper-educated workforce.

The Life Sciences Workforce Conference also included the presentation of planned construction activity within the life sciences sector. With a current capacity of 46,000,000 square feet and 90,000 employees, we arrive at a very rough, industry-wide ratio of 500 square feet per employee. Currently there are over 19,000,000 square feet of planned life sciences space, scheduled to go online between 2021-2024, with about half of this already under development. Even using the low, "guaranteed" number of 10,000,000 square feet of space, this translates into 20,000 new employees that will be needed by 2024. If all planned 19,300,000 square feet come into existence, this number increases to 38,600 new employees needed to fill these new spaces.

In short, the supply of talent is not keeping up with the demand.

So, how will Massachusetts respond to this challenge?

- We must expand investment in K-12 science education. The pipeline starts with our youngest generation being well prepared to pursue a STEM career.

- Accelerate efforts at career exploration and awareness at the K-12 and college level. Students approach academic subjects with more interest and enthusiasm if they can see a future for themselves where their studies will matter. Even those who enjoy and excel in STEM subjects are seldom aware of the myriad of career opportunities the life sciences industry can provide.

- Students must have a better understanding of what continued education looks like after high school. For many teens, the idea of continuing "school" for an additional four years—or an additional ten years to achieve a Ph.D.—is anathema. Through building relationships between industry professionals and students (and teachers) and providing accurate and inspiring informational guides we can illuminate pathways to meaningful and attainable careers.

- **The current paradigm of only recruiting college graduates (often from a limited number of schools) and watching them bounce from one competitor company to another is not working.** The industry, academia, government, and non-profits must work together to create new pathways into the industry for people with non-traditional backgrounds. Intensive, short-term training programs can prepare individuals with transferable skills for many entry-level jobs in the industry. This will not relieve the challenge of growing the field of doctoral-level trained scientists who are truly necessary to fill many industry roles. However, training programs can provide a novel point of entry for those outside of the traditional educational pathway and hence grow the field of mid-skilled support staff necessary for any life sciences enterprise.

The data presented in the Life Sciences Employment Outlook and at the Life Sciences Workforce Conference should be viewed as a call to action. The Massachusetts life sciences industry currently leads the world. Our continued success depends on a world-class workforce. ■

Visit MassBioEd.org to learn more and download the full report at MassBioEd.org/Labor-Market-Information.

Coming Off of a Record-Breaking Investment Year, What's Next for the Biopharma Industry?

By Ben Bradford, Vice President of Economic Development and Membership, MassBio

For decades, the biopharma industry has worked tirelessly to develop breakthrough therapies, treatments, and cures that address the toughest unmet medical needs and save patient lives. So, it is no surprise that the industry stepped up en masse to address COVID-19 by developing diagnostics, therapeutics, and vaccines in record time.

The speed and success of these innovations generated enormous investor interest and confidence in biopharma's R&D abilities. In 2020, we saw record-breaking investment across the industry—even beyond COVID-19 related technologies: nationally, 289 United States-based biopharma companies raised $14 billion in venture funding, with an average deal size of $48 million, in 2020.

Massachusetts' biopharma industry played an outsized role in the industry's growth in 2020. As MassBio's 2020 Biopharma Funding Report points out, Massachusetts-based companies raised $5.8 billion in venture capital funding—41% of all biopharma venture funding in the United States. These numbers were a 93% increase compared to 2019 and a 20% increase compared to 2018's previously record-breaking year. The state also had a substantive impact in the IPO market, with 21 IPOs from Massachusetts-based biopharma companies, a 110% increase from 2019, accounting for 32% of all United States-based biotech IPOs.

Within the Massachusetts life sciences cluster, we've seen some other exciting trends. While the Cambridge/

Boston area remains an innovation powerhouse, our report shows that the state's mini-clusters are continuing to grow. More than 50% of Massachusetts-based biopharma companies that received venture capital funding were located outside of Cambridge, and nearly 40% of Massachusetts-based biopharma companies that went public in 2020 were located outside of Cambridge. As the life sciences industry continues to expand, the growth of these mini-clusters beyond Cambridge and Boston will be key in sustaining the industry's stature in addressing the world's greatest unmet medical needs.

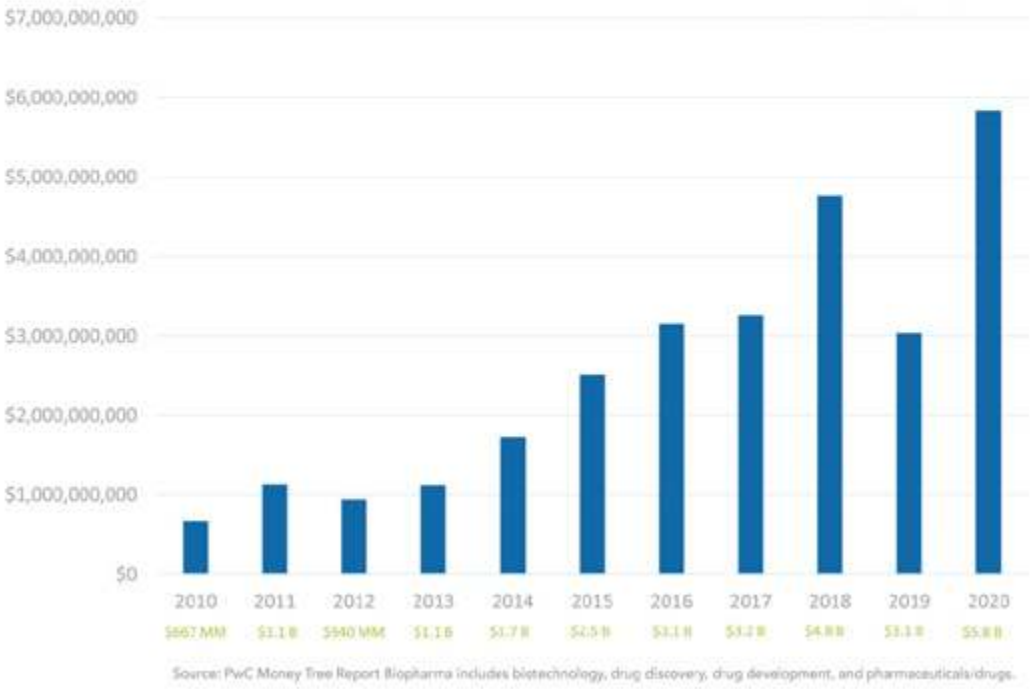
Since the beginning of the pandemic, more than 95 companies with a presence in Massachusetts have worked to address COVID-19 through diagnostics, vaccines, and therapeutics. All of the vaccines currently approved for use in the United States have been developed, at least in part, through Massachusetts' innovation: two were born from companies with a presence in Massachusetts and one was developed in part by researchers at one of Boston's renowned hospitals. It's also important to note that the majority of the 95 companies working to address the pandemic aren't household names—they are the same small and emerging biotechs that are also driving innovation in non-COVID-19 therapeutic areas. These companies are pre-revenue and operate on razor thin margins while advancing complicated—and potentially life-changing—science.

Through sustained investor confidence in the industry's abilities and the continued partnership with state government, the Massachusetts biopharma cluster can continue to thrive. We are already seeing strong funding levels in the first half of 2021. COVID-19 is not going away anytime soon, nor will it be the last pandemic of our time. We need stakeholders to continue to support the industry so in the near and long-term we can apply the lessons learned from the pandemic to address existing diseases and prepare for any future global health crises that may emerge. ■

Venture Capital Investment Biopharma

Massachusetts-based biopharma companies raised $5.8B in venture funding in 2020.

41% of all biopharma venture funding went to Massachusetts-based biopharma companies.



Source: PwC Money Tree Report Biopharma includes biotechnology, drug discovery, drug development, and pharmaceuticals/drugs.

Congressional Effort to Lower Drug Prices Would Cost 10,000 Biotech Jobs in Massachusetts

By Susan Martin, Senior Director of Government Affairs and Advocacy, MassBio

Citing rapidly climbing drug prices and growing complaints from constituents about how they cannot afford their prescription drugs, Congressional Democrats are seriously considering legislation that, if passed, would upend the biotech innovation system that has made the U.S. the world leader in developing and delivering groundbreaking new cures and therapies to patients. The bill, known as H.R. 3, the "Lower Drug Costs Now Act," contains a variety of provisions that its proponents believe will lower drug costs for patients. Yet, we know from numerous studies that the bill will have the unintended consequence of stopping drug development for the hardest to treat diseases while causing hundreds of thousands of job losses in the biotech sector nationally.

The core of H.R. 3—and its most problematic proposal—is a policy referred to as "international reference pricing." This proposal would remove market-based price negotiations and replace them with a system where the government caps the price of a drug to a level at or below 120 percent of the average price of that same drug across six countries including Australia, Canada, U.K., France, Germany, and Japan.

Proponents of this idea argue that Americans should not be paying more than other countries for the same drugs. Yet, we know that lifesaving drugs become available to patients abroad at much slower rates, and sometimes not at all, because of the extremely restrictive price negotiation systems in those countries.

Furthermore, government price setting like this would significantly reduce the incentive needed for biopharma companies to pursue the riskiest science to address the most challenging unmet medical needs. Data shows that a growing percentage of newly developed drugs are coming from small and emerging biotech companies which are predominantly pre-revenue, non-commercial, and privately funded. If H.R. 3 passes and market incentives

disappear, biotech investors will likely move to other industries and markets, leaving promising early-stage life sciences companies without the investments needed to deliver transformative treatments to patients.

A recent study conducted by Vital Transformation shows how this would play out. According to the study, if H.R. 3 had been in place over the last ten years, 90 percent of the new medicines developed by small companies would have never come to market.[1] That is over 60 new therapies that treat lymphoma, lung cancer, breast cancer, diabetes, multiple sclerosis, psoriasis, and hypertension that patients would not have today. This analysis is consistent with the Congressional Budget Office's (CBO) estimate that, because of H.R. 3, fewer new therapies would become available to the patients who need them the most.

In addition to the negative impact on patient health, the economic impact of H.R. 3 cannot be overlooked: passage of the bill could result in 200,000 fewer biopharmaceutical jobs nationwide and nearly 1 million job losses across the economy.

Ensuring patients have affordable access to all therapies must be the core of Congress' policymaking process. Instead of upsetting the market-based system that has made the U.S. the world leader in the development of new medicines, Congress should pass policies that lower out-of-pocket costs for consumers at the pharmacy counter. And for those on Medicare who are often on a fixed income, Congress should look at policies that can distribute out-of-pocket expenses over the course of a year instead of in big payments upfront.

The United States has long been the global leader in biopharmaceutical research, development, and manufacturing. H.R. 3 would send investments in innovation elsewhere with little evidence of positive patient impact. Our patients have access to more new and novel treatments than any other country in the world. Now, we must work to protect both innovation and patient access to new, potentially lifesaving therapies. ■

[1]vitaltransformation.com

Member Spotlights

Each month, MassBio spotlights a member company and the great work they do to advance the life sciences industry and support the patients we serve.

forma THERAPEUTICS Q&A

In January, we spoke with Frank Lee,
CEO, Forma Therapeutics. Frank joined Forma Therapeutics as chief executive officer in 2019 with more than 25 years' global experience in product development and commercial leadership across a range of therapeutic areas within the biotech and pharmaceutical industry. Prior to Forma, Frank was senior vice president, global product strategy and therapeutic area head for the immunology, ophthalmology and infectious diseases at Genentech.

Tell us about your organization, its mission, and current initiatives.

Forma is a fully integrated biopharmaceutical company focused on the research, development, and commercialization of novel therapeutics for patients with rare hematologic diseases and cancers. We consider ourselves to be in the business of building futures—for patients, for their families and for our employees.

For Forma, 2020 was a transformative year, albeit a year like no other in which everyone was affected by the COVID-19 pandemic. We hired amazing and diverse talent; advanced our programs in sickle cell disease, metastatic castration-resistant prostate cancer, and AML; and secured additional capital through an upsized IPO and follow-on financing.

How does your organization's activities help patients now and into the future?

Even on the best days, patients' experiences with their disease can be challenging, and we strive to understand the nuances of their care needs. We know that people with sickle cell disease experience more days in debilitating pain than pain-free days. Too often, men with prostate cancer fight aggressive cases.

To build a better future, Forma keeps a dual focus on patients' journeys and ways to bring those journeys to our colleagues. For patients, for example, we take steps such as making clinical trial participation during the COVID-19 pandemic safer by offering extended travel support and covering PPE costs or adding rapid testing to pre-screens at sites.

To keep patients' journeys close to our colleagues, we seek input through focus groups and advisory boards, as well as through an internal story-telling series focused on patient and caregiver experiences.

Patients are always on our minds, and they renew our purpose each day.

What do you see as the biggest challenge facing the life sciences industry today?

I'm kept up at night by the question of how to improve safe, empathetic access to care and medicines for all members of society. By and large, folks who have the means don't have any issues. They have good access to clinics, doctors, and medicines. But there's a huge disparity, and I am increasingly concerned about the impact it has nationally and globally. In middle America—in Tennessee, where I'm from, and Indiana, where my wife is from—urgent care has become people's primary care, which isn't sufficient.

What's next for your organization? What are you focused on in the coming year?

We're excited to advance our clinical pipeline—enrolling individuals and hopefully seeing data that will get our molecules closer to those patients.

Second, we're establishing ourselves as a trusted partner locally in Greater Boston and in therapeutic areas like sickle cell. I recognize that true long-term commitment isn't done overnight, or even in a year. One woman living with sickle cell disease told me that patients want to forge the type of community that hemophilia has, and we intend to be a major player in making that happen.

Finally, we're becoming a multi-dimensional company, growing in a way that's consistent with our culture and values. Culture is what grounds and carries the team when the science and the industry are unpredictable. 2020 brought about some of the most unpredictable times any of us have witnessed, and Forma stays humble but determined as 2021 begins.. ■

Harvard Pilgrim Health Care

Q&A

In February, we spoke with Sean Haney,
Senior Director of Sales for Harvard Pilgrim's Massachusetts market. Sean has more than 25 years of health insurance industry experience and has spent the last 10 with Harvard Pilgrim Health Care. His prior roles at Harvard Pilgrim include manager of the new business sales team and senior account executive for new business sales.

Tell us about your organization, its mission, and current initiatives.

Harvard Pilgrim is a not-for-profit health services company that provides health benefit plans, programs and services to more than one million members who live and work in New England and beyond. Our mission is to improve the quality and value of health care for the people and communities we serve.

We've partnered with MassBio to offer high-quality health plans to member companies that qualify as large groups* through *Edge* Benefits. These offerings are tailored to fit the needs of the biotech populations we serve and feature a higher level of benefits with a focus on delivering value and outstanding service.

Harvard Pilgrim is continuously innovating and improving to better serve our customers. We're proud of our track record for bringing best-in-class programs and services to market that deliver outstanding value for our clients, many of whom are in the life sciences industry.
**Over 50 full-time equivalent employees*

How does your organization's activities help patients now and into the future?

One of the things that Harvard Pilgrim has in common with life sciences companies is that we work hard to identify and develop innovative approaches to caring for people.

For us, a big part of that involves fostering and facilitating human connections. All Harvard Pilgrim members have access to our clinical care team of registered nurses, wellness coaches, and licensed social and behavioral health workers.

We've implemented mobile technology that helps members connect more easily with our nurses and health coaches. Our free care management app includes a two-way messaging feature that members can use to ask their care team questions. And our care team can encourage members to manage their health conditions and keep up to date with health screenings.

By building personal connections and trusted relationships, our team guides members to better health, reduced risk and lower costs.

What do you see as the biggest challenge facing the life sciences industry today?

We have many life sciences clients and hear firsthand about the challenges they have attracting great talent and retaining valuable employees. Massachusetts is home to industry giants, so competition for top-notch workers is

fierce—even with the unfortunate rise in unemployment due to the pandemic.

Health insurance is one of the most highly valued employer-sponsored benefits. We work with our life sciences clients on solutions to ensure their health plan offering is supremely attractive. Access to top doctors and hospitals, rich benefits that keep out-of-pocket costs for services low, and digital solutions that enhance the overall health care experience are key when it comes to recruiting and retaining top employees.

Harvard Pilgrim is pleased to partner with MassBio as their carrier of choice for the *Edge* Benefits program. We offer a health plan with robust medical benefits at a very competitive price point, exclusively for MassBio members.

What's next for your organization? What are you focused on in the coming year?

Harvard Pilgrim will continue to focus on initiatives that improve the member experience and members' overall health and well-being.

In the digital solutions space, we recently made the Sanvello mobile app available to our members. This powerful online tool gives users clinical techniques for dialing down the symptoms of stress, anxiety and depression.

Growing families have support through Ovia HealthTM and ProgenyHealth®. Ovia HealthTM is an app-based maternity and family health solution for reproductive health, pregnancy and parenthood. ProgenyHealth® is a program that helps ensure babies born prematurely or with complex medical conditions get the right care in the hospital and come home at the right time to supported, empowered families and caregivers.

Finally, we've developed ways to make our members' outstanding experience with us even better. Harvard Pilgrim's SmartStart program helps new members—including those with complex care needs—transition to Harvard Pilgrim seamlessly, with no gaps in care or coverage. ■

Bench.
The right leader means everything.

Q&A

In March, we spoke with Nova Diop,
General Manager, Bench International, who is leading the expansion of Bench's footprint in Boston. Nova has six years of experience in executive search and ten years of combined experience in hospitality operations in the UK and strategy consulting in Boston.

Tell us about your organization, its mission, and current initiatives.

Bench International is a premier woman-founded and owned, global retained executive search firm serving the Life Sciences (including pharmaceuticals, biotechnology, diagnostics, devices, and instrumentation) Healthcare, and Animal Health sectors for over 45 years. The firm is one of the most renowned experts in diversity recruitment at the board and executive level. Sharing our clients' patient-centric focus, Bench's mission is to make life changing placements so our clients can change lives!®

Our initiatives for 2021 are centered around supporting our clients in finding and cultivating diverse leaders, as the shareholders, doctors, and patients depend on them to bring forward the next generation of medicines and technologies. Life sciences companies have increased their focus on diversity, equity, and inclusion at the highest levels of the organizations. At the same time, recent legislation and guidance have required Boards to increase the number of women and underrepresented groups, and Bench is proud to leverage our network of life sciences leaders to address these issues and bring fresh perspectives and new ideas to the table.

How does your organization's activities help patients now and into the future?

Although many factors determine success in the life sciences industry, some of which are out of our control, the right leader can be the difference in whether a promising drug reaches a patient or remains relegated to the "shelf." Persistence, perseverance, and, what we like to call "generosity of spirit," are a few of the criteria that we are consistently evaluating for our clients.

Representing the voice and face of the patient at the executive and Board-level within biotech and pharma has been a critical goal throughout our history. For example, we have co-created Chief Patient Officer roles within the pharmaceutical industry, who were responsible for guiding the company to ensure patient-centric clinical trials. When recently recruiting for a CEO to lead a breast cancer detection startup, we were inspired by the passion and stories of the women leaders, who were too often directly or indirectly battling the disease.

We have been fortunate over the last several decades to see the impact of our work on the industry. Individuals that we brought into industry grew to become C-level leaders and are now often board members imparting their guidance and wisdom. We are humbled by the contributions that they have made to patients around the world, and it motivates us to continue to find and build the next generation of leaders..

What do you see as the biggest challenge facing the life sciences industry today?

One of the biggest challenges facing the life science industry is closing the diversity gap with talented leaders, who also happen to be female, Black, Latinx, LGBTQ, and other historically underrepresented groups.

We recently announced the launch of our proprietary Bank of Women®, a program that features 550+ executive women leaders for board seats and the C-suite. Empowering female leaders has been a career-long commitment of Bench's CEO and Founder, DeeDee DeMan. As a result, Bench has been building this cohort of exceptionally qualified female leaders for over 30 years. The introduction of Bank of Women® represents a unique and innovative opportunity for the life sciences industry to recruit experienced women leaders for their C-suite and board of director positions.

Our commitment to diversity also includes building key local alliances and creating partnership with specific platforms that contribute to the life sciences industry. Our memberships and sponsorship include New England Healthcare Executive Network, Life Science Cares, Women in Bio, Massachusetts Biotechnology Council and BioNJ.

What's next for your organization? What are you focused on in the coming year?

Bench's main focus is to continuously bring quality and diverse leaders at the board level, C-suite, and senior leadership team to our clients, while closing the diversity gaps. Since the inception of the firm, 33% of all leaders placed in Bench's 45+ year history have been gender and ethnically diverse. We signed the MassBio CEO pledge to continue our impact in ensuring a diverse pool of candidates, while assisting our clients in hiring the best athletes.

Time is critical for patients and our clients, and we are focused on developing robust candidate slates rapidly and efficiently, while maintaining our commitment to a personal, and high-touch process. Our clients are building their leadership teams, and at times entire companies de novo, and they require unique talent within a short timeframe.

Bench leverages our research, operations, and recruitment teams using our "One Global Team, No Borders, No Boundaries" approach to best serve our clients. Furthermore, Bench invests in its own IT security solutions to vigilantly design and maintain firewalls, as well as layers of data security lockdown. ■

PRAHealthSciences

Q&A

In April, we spoke with Brandon Early,
Vice President for Project Delivery, PRA Health Sciences. Brandon is a drug developer with experience spanning CRO and biotech sectors. He has been with PRA since 2017 where he looks for every opportunity to take PRA's diverse global expertise and apply it to create value for the biotech sector.

Tell us about your organization, its mission, and current initiatives.

PRA Health Sciences is a leading, global contract research organization with a passion for intelligent innovation across all global services. We have operations in over 90 countries and are fortunate to work with clients ranging from top 10 pharma to small & emerging biopharma. Important for the MassBio community is our deliberate focus on this small/emerging sponsor segment: approximately 50% of the trials we run within our core CRO services are from this small/emerging segment. This is because biotech is our company's heritage. We have the luxury of combining our global heft with our sponsors' unique drug development goals to yield custom approaches to each program. Many sponsors are surprised by the breadth of our expertise that begins years before a clinical trial starts and runs years past marketing approval. We've let biotech experience run through the whole company, so every team knows how to create these custom solutions for our sponsors.

How does your organization's activities help patients now and into the future?

We have supported the pivotal trials that led to approvals of over 95 important products currently on the market. We've been successful by keeping a keen eye on how patients are treated and what they need from any new treatment. Once we know how/where patients are interacting with medical care, we set to build trials that fit with that care pattern so that clinical research is a true care option for any patient. These approaches vary by indication and therapeutic modality, and our teams are skilled at building from these therapeutic foundations.

What do you see as the biggest challenge facing the life sciences industry today?

We continue to track the monumental pace of medical innovation. This pace has caused tremendous competition for sites and patients, and sponsors must consider how their products differentiate themselves even during trials, let alone when marketed. These pressures are compounded by the increased 'digitization' of trials that was occurring prior to the Covid 19 pandemic but is now at a fever pitch. Sponsors are left to navigate a slew of point solutions addressing a variety of clinical trial pain points without knowing which pain point is actually worthy of investment. Hence the need for truly custom approaches to trials to differentiate, innovate, and deliver patient-centricity.

What's next for your organization? What are you focused on in the coming year?

On February 24, 2021, we announced that PRA will be acquired by ICON Plc. ICON's acquisition of PRA will bring together two strong, client-focused companies—creating an organization in the best position to meet market demands. This proactive union of ICON and PRA will provide clients broader service offerings, greater therapeutic depth and geographic coverage, and enhanced clinical and commercial solutions. PRA and ICON's expertise in biotech will be carried into the new combined organization. ■

BioAgilytix Q&A

In June, we spoke with Dominic Marasco,

Chief Commercial Officer, BioAgilytix. Dominic has more than 22 years of executive experience in C-suite strategy development, commercial operations, strategic business development, alliance management, and financial resourcing within the pharmaceutical, biotech and medical device industries. He is a member of the Health Policy and Management Executive Council at the Harvard T.H. Chan School of Public Health and is a University of Southern California Adjunct Associate Professor of Pharmaceuticals and Health Economics for the School of Pharmacy, as well as a member of the Strategic Board of Advisors at Unicycive Therapeutics Inc.

How does your organization's activities help patients now and into the future?

The services we provide play a critical role in bringing new life-changing biologic therapies to market. With a staff of more than 600 colleagues, we deliver these services globally through three state-of-the-art laboratories located in Durham, NC, Boston, MA and Hamburg, Germany. Each facility is staffed and equipped to support the varied clinical development needs of our pharmaceutical and biotechnology partners. Our success continues to depend on the dedication of our employees, with the overarching goal to always provide clients with high quality program support, with the key focus on patients.

The company's highly experienced scientific and quality assurance professionals deliver world-class science, proven data integrity, and deep regulatory experience to help ensure successful outcomes for these global studies. Since 2018, we have supported the development of over 35% of the biologics approved by the FDA (Food and Drug Administration), with this number expected to grow dramatically in the years to come

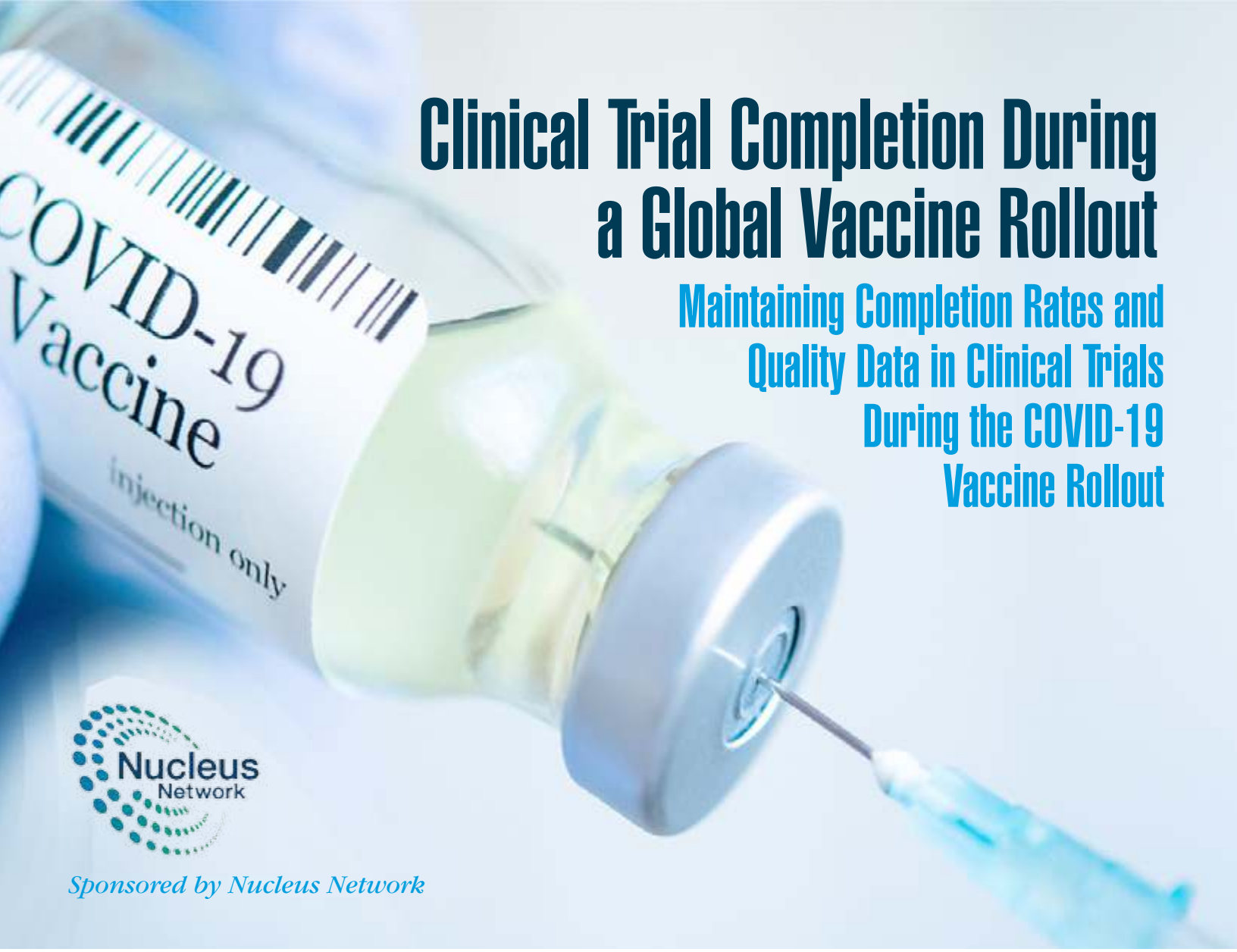
What do you see as the biggest challenge facing the life sciences industry today?

The ability to attract, develop and retain individuals from diverse backgrounds is key to our industry's current and future success. Therefore, Diversity, Inclusion & Belonging (DI&B) will be a critical success factor for BioAgilytix and industry growth. At BioAgilytix, as we continue to evolve, we recognize that our ability to address the needs of diverse groups is crucial to sustainable growth. Therefore, in early 2021, the company established a Global DI&B function with the goal to better align the needs, goals and objectives of the affinity groups with the broader business.

Second, we are working to enhance our educational and technical partnerships. We actively partner with local colleges and universities, and even local high schools, to create internships for students interested in careers in leading-edge drug development. Lastly, we also focus on sustainable business infrastructure to meet our customers' evolving needs. All of these activities are critically important as we continue to grow our business..

What's next for your organization? What are you focused on in the coming year?

Our single biggest goal is to provide the best customer service by helping our clients get lifesaving biologics approved and to patients. Our approach is to always hire the brightest scientists from around the world who then have complete project ownership to work on some of the most complex biologics in the world. This approach yielded BioAgilytix one of the highest rated Net Promoter Scores (NPS) in the industry. Additionally, we continue to stay ahead of the curve by continued expansion and investment in our cell and gene therapy offerings as the industry continues to grow in this area. Our driving force is to provide the best advisory, consultative and quality service to our customers. ■



Clinical Trial Completion During a Global Vaccine Rollout

Maintaining Completion Rates and Quality Data in Clinical Trials During the COVID-19 Vaccine Rollout

Sponsored by Nucleus Network

By Jeffery Wong, Director of Business Development, Nucleus Network

The pace of the international rollouts of the COVID-19 vaccines are quickly helping the world open up again after a year of restrictions and adjustments to living with a pandemic. While the overall benefits are undeniable, there needs to be careful consideration on the impact that the rollout will have on clinical trials that are conducted during the rollout period to ensure participant uptake doesn't impact the reliability of the data reported during the trial.

Addressing this challenge requires forward-thinking for all trials expected to commence within the rollout period, considering location, communication, and built-in adaptability in the protocol.

The location should match the desired vaccination levels for the study, such as targeting vaccinated, recovered, or COVID-19 naïve populations. The situation can also change rapidly from study initiation up until completion, so there needs to be flexibility with changes in vaccination rates and even accounting for new strains that may be vaccine resistant when designing the protocols.

The key element to ensuring the successful outcome of a clinical trial is the same as ever though—open and direct communication.

This begins during protocol design when clinical trials administrators need to collaborate with sponsors to

ensure the flexibility and adaptability of the protocol will align with the demographics of the site selected (especially in multi-site and multi-country clinical trial providers). This requires the sponsor-facing members of the provider to have in-depth understanding of how the vaccine rollout is progressing, as well as how any subsequent outbreaks could impact the trial.

If a participant becomes eligible for a vaccine, as always, their safety must become a priority and they should be encouraged to receive the vaccine, however, meaningful and robust communication with participants is also vital. By investing significant resources in understanding the concerns of current participants, as well as those considering participating in a clinical trial, clinical trial providers can better inform their approach to proactive communications that directly address those concerns at the beginning of the screening process.

By increasing communication channels and frequency, as well as developing strategies around crossover trials and offering alternative locations with different vaccine rollout stages in the population, much of these challenges can be addressed. For example, medical officers should proactively engage both sponsors and participants to ensure that every trial conducted during this period is appropriately handled to allow for the vaccine rollout, and that each trial can be relied upon to report actionable, timely, and reliable data.

Nucleus Network has taken a proactive approach with all of these elements. With sites in Brisbane (low case numbers, low vaccination rates and options), Melbourne (low case numbers, rapidly rising vaccination rates) and Minneapolis (relatively high recovered population, high vaccination rates) the appropriate site can be selected to target the desired demographic for the trial. ■

If you would like to understand more about Nucleus Network's proactive approach to maintaining quality data reporting during the vaccine rollout, please contact j.wong@nucleusnetwork.com.au.

Jeffery Wong oversees Nucleus Network's global business development team spanning both Australia and the USA and is passionate in providing sponsors with optimal early phase clinical trial solutions. With a background in pharmaceutical sciences, biotechnology and business as well as more than 15 years of experience in project management and clinical development, Jeffery is a conduit of communication between all stakeholders in the trial process.

Exploring the Current State of Biopharma Partnerships

By Steve Powell, Director of Business Development, MassBio

More than a year into the COVID-19 pandemic the world has experienced unprecedented loss and hardship, but—in this time—we've seen life sciences companies do what they do best: make patient lives better by solving complex global challenges with science, technology, and innovation.

Many of these groundbreaking solutions were born from partnerships. In fact, in the last year, we have seen more industry collaboration than ever before—between established and early-stage companies as well as between competitors—showing us just what is possible when companies partner to drive results for patients. Beyond vaccine development, the pandemic blurred the lines of competition as leading biopharma companies struck up manufacturing agreements to serve the common good by inoculating the global population. Partnerships like these will remain essential as the pandemic evolves and new medical challenges arise—no single entity is prepared to tackle these future obstacles alone.

If the life sciences community takes anything away from its response to COVID-19, I hope that it is an understanding that we are stronger together than we are alone. This rise in partnerships opens the door for a new, collabora-

tive approach to innovation in a wide range of disease areas, potentially ensuring the success of the industry now and into the future.

So, what can we do now to make this future a reality? For starters, look at the Massachusetts life sciences cluster, which is largely comprised of small and emerging, pre-revenue biotechs that are making big bets on risky, complicated science. These emerging companies are continuously innovating to address the greatest unmet medical needs. We've also seen an incredible number of breakthrough technologies cultivated within Massachusetts' academic institutions. Because of these factors, over the last 20 years, we have seen a steady migration of pharma companies to Massachusetts who come to access this cutting-edge innovation and the talent that drives it. In fact, 19 of the top 20 pharma companies have developed a presence in Massachusetts, and it's no wonder: more than 60% of the products the FDA approved originally come from small companies' R&D. As a result, we've seen a growth of partnerships between early-stage startups and institutions and established biopharma companies as these companies seek to fulfill their mission to address unmet patient needs.

But the answer isn't as simple as "right place, right time"—the Massachusetts life sciences ecosystem plays a central role in driving the success of these partnerships. In particular, Massachusetts has:

- The talent (and the support for talent): The unmatched talent from some of the best universities in the world paired with a robust network of incubators and accelerators ensure that even the earliest-stage companies are as strong and sustainable as possible.

- The connections: Whether we want to believe it or not, serendipity can play a big role in the growth of an emerging company. The density of biotech innovators, investors, and established companies means that Massachusetts is a breeding ground for collaboration.

- The capital: As MassBio's 2020 Biopharma Funding Report points out, Massachusetts-based companies raised $5.8 billion in venture capital funding—41% of all biopharma venture funding in the United States.

- The champions: From government to the private sector, all members of the Massachusetts ecosystem are committed to the growth of the biopharma industry.

In the first six months of the year, MassBio has consistently worked to bring together these different entities to strengthen the life sciences innovation ecosystem. With a focus on accelerating innovation, MassBio's Partnering Week (January 25 – 29, 2021) and the State of Partnering (May 10 – 14, 2021) connected early-stage companies developing breakthrough technologies with major biopharmaceutical organizations and industry-leading experts to help grow their businesses. Over the course of these two weeks, we connected more than 1,000 founders, academics, and emerging leaders with open information sessions hosted by Biogen, Johnson and Johnson, EMD Serono, BeiGene, Bayer, Ipsen, and Takeda, and an innovator bootcamp featuring experts from Bayer, KPMG, Marsh & McLennan, Morgan Stanley, and Rothwell Figg.

But this is just the beginning. For biopharma innovation to thrive in a post-pandemic world, we must continue to strengthen the innovation ecosystem so that it's as easy as possible for emerging companies and established biopharmas to build strong, sustainable partnerships. By doing this, we can ensure that breakthrough science can get from the lab bench to the patient bedside. ■

MassBio's 2021 State of Possible Conference:

Reflecting on a Year of Innovation, Strength, and Leadership

By Laura Rudberg, Director of Events, MassBio

In May, MassBio convened more than 800 industry leaders for its annual State of Possible Conference. This event, though virtual, was one of the best we've hosted to-date, amassing a record-breaking number of registrations and bringing together some of the most world-renowned leaders in the life sciences.

MassBio's President and COO Kendalle Burlin O'Connell kicked off the event, reflecting on the industry's profound leadership in addressing the COVID-19 pandemic and celebrating the role of Massachusetts' small and emerging biotechs in creating new tomorrows for patients everywhere. The State of Possible Conference took place mere weeks before the Massachusetts economy opened without COVID-19 restrictions, and it is because of the life sciences that normalcy has largely been achieved. But, as MassBio Board Chair Chuck Wilson pointed out in his remarks, the onus is on the industry and its stakeholders to create the opportunities that will best support the sustainability of the life sciences cluster in Massachusetts now and into the future.

Moderna, one of the most well-known companies in Massachusetts' life sciences ecosystem, was featured during the Conference. And in a remarkable keynote address, Tal Zaks, CMO, discussed the factors that led to the successful development of Moderna's COVID-19 vaccine, how he and his team persevered in a virtual world, and the towering strength of the Massachusetts life sciences cluster in cultivating the best possible ecosystem for biotech companies to thrive. Moderna's CEO Stéphane Bancel, was later awarded the 2020 Henri A. Termeer Innovative Leadership Award for his contributions to the growth and success of the life sciences industry in Massachusetts. Bancel epitomizes what is possible in our industry and it was truly an honor to present him with this award. In his remarks he revered the significance of industry collaboration and discussed why the extraordinary feats the industry has accomplished in the last year are only the beginning.

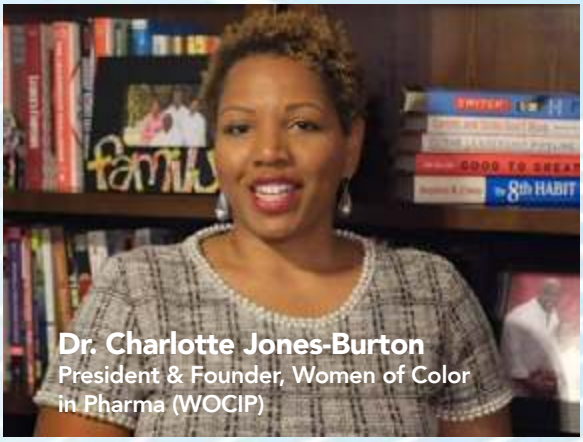
To better explore the patient experience, we heard Possible Talks® from Sebastian Lefebvre, Senior Director of Data Sciences, Genomics, and Bioinformatics at Alexion, and Loriana Hernandez-Aldama, Chief Warrior of ArmorUp for Life. Lefebvre shared painful statistics around the number of children affected by rare disease and underscored the critical importance of early diagnosis and how data science can play a pivotal role in shortening the diagnostic journey. Hernandez-Aldama, a two-time cancer survivor, shared her personal experience as a patient and how her three P's—Prepare, Present, Prevail—can make

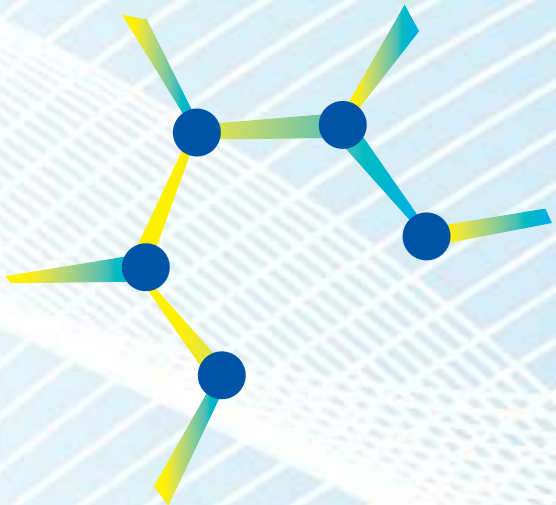
better patient outcomes possible.

The Conference also featured two panels that looked at the life sciences industry more broadly. The first explored how the industry's response to clinical trial disruptions caused by the pandemic may have helped accelerate innovation and transform the future of trials. The conversation focused largely on the role of diversity in clinical trials, what can be done to better reach minority populations, and why diverse trial participants will be critical to future breakthrough therapies. And, on the heels of a record-breaking year for biopharma funding, we also heard from a panel on what the funding landscape looks like for 2021 and beyond, and the potential impact of SPACs.

Finally, to close out a day of though-provoking content, Dr. Charlotte Jones-Burton, Founder & President of Women of Color in Pharma, delivered her keynote on how the biopharma industry can address health inequities and positively impact patients and communities of color.

This event would not have been possible without the support of our sponsors. Once again, we'd like to thank Astellas, Bayer, BeiGene, Biogen, Corealis Pharma, Ipsen, KPMG, Marsh & McLennan Agency, Mispro, Morgan Stanley, PTC Therapeutics, Rothwell Figg, Sanofi Genzyme, Sunovion, Takeda, Thermo Fisher Scientific, and Vertex. ■





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