



Joel S. Marcus

Advancing Human Health

An Interview with Joel S. Marcus,
Executive Chairman and Founder,
Alexandria Real Estate Equities, Inc. and Alexandria Venture Investments

EDITORS' NOTE Joel Marcus co-founded Alexandria Real Estate Equities, Inc. in 1994 as a garage startup with \$19 million in Series A capital. As CEO from March 1997 to April 2018, he led its growth into an S&P 500 company with an approximately \$18 billion total market capitalization and a total shareholder return of approximately 1,350 percent from the company's IPO in May 1997 to December 31, 2017. Alexandria, which celebrated its 20th anniversary as an NYSE listed REIT in May 2017, is the only publicly traded pure-play office/laboratory REIT. In 1996, Marcus founded the company's venture capital arm, Alexandria Venture Investments, to provide strategic investment capital to innovative life science and technology entities developing breakthrough therapies and technologies. Marcus introduced the company's thought leadership platform in 2011, when he co-founded the renowned Alexandria Summit®. The Alexandria Summit convenes a diverse group of visionary partners and key stakeholders – from the biopharma, technology, agribusiness, medical, academic, venture and private equity capital, philanthropy, patient advocacy, and government communities – to address the most critical challenges in health-care. With a focus on sustainability and philanthropy, Alexandria's corporate responsibility business vertical affirms the company's commitment to making a positive impact on the world. Marcus is also personally engaged in numerous mission-critical philanthropic efforts, which include his service as Chair of the Navy SEAL Foundation's 2017 New York City Benefit in support of the Naval Special Warfare community and their families. Marcus was one of the original architects and co-founders of Accelerator Life Science Partners, for which he serves on the board of directors. Marcus also serves on the boards of Applied Therapeutics Inc., Boragen Inc., Frequency Therapeutics, Intra-Cellular Therapies, Inc., MeiraGTx Holdings plc, and Yumanity Therapeutics; the Foundation for the National Institutes of Health (FNIH),

MassBio, and Scripps Research; and the Emily Krzyzewski Center, the National September 11 Memorial & Museum, the Navy SEAL Foundation, the Partnership for New York City, and Robin Hood. Additionally, he is a member of the MIT Corporation Visiting Committee for the Department of Biology. Prior to co-founding Alexandria, he had an extensive legal career specializing in corporate finance and capital markets, venture capital, and mergers and acquisitions. During that time, he acquired an expertise in the biopharmaceutical industry and was one of the principal architects of the Kirin-Amgen EPO joint venture in 1984. He was also a practicing certified public accountant and tax manager with Arthur Young & Co., where he focused on the financing and taxation of REITs. He was named one of Real Estate Forum's 2017 Best Bosses in commercial real estate and was previously a recipient of the EY Entrepreneur Of The Year Award (Los Angeles – Real Estate). Marcus earned his undergraduate and J.D. degrees from the University of California, Los Angeles.

COMPANY BRIEF Alexandria Real Estate Equities (are.com) is an urban office REIT uniquely focused on collaborative life science and technology campuses in AAA innovation cluster locations. Founded in 1994, Alexandria pioneered this niche and has since established a significant market presence in key locations, including Greater Boston, San Francisco, New York City, San Diego, Seattle, Maryland and Research Triangle. Alexandria has a longstanding and proven track record of developing Class A properties clustered in urban life science and technology campuses that provide its innovative tenants with highly dynamic and collaborative environments that enhance their ability to successfully recruit and retain world-class talent and inspire productivity, efficiency, creativity and success. Alexandria has successfully utilized Harvard Business Professor Michael Porter's cluster theory as the foundation for its proven cluster model, which identifies four critical components for life science clusters to thrive: location, innovation, talent, and capital. To foster innovation and collaboration in the nation's top life science ecosystems, Alexandria made the crucial decision to pursue its urban cluster campus strategy as the first mover in Mission Bay (2004), New York City (2005), and Cambridge (2006).

How has the mission of Alexandria Real Estate Equities evolved since the founding of the company in 1994?

Our mission is to create clusters to ignite and accelerate the world's leading innovators in their pursuit of advancing human health by curing disease and improving nutrition. Improving nutrition is a newer goal that we're just starting to develop.

We have a lot of agriculture technology (agtech) initiatives coming up in the pipeline, which reflects an evolution in our mission.

Our focus on advancing human health is made up of fighting disease and it is now increasingly including nutrition.

The human body must have adequate healthy food, so we focus on serving the life science and technology industries, as well as the agtech area – how the technologies relating to the agricultural industry are driving fundamentally disruptive changes in our whole farm-to-table ecosystem.

That is our overarching purpose.

When you look at the focus on agtech, was this a natural progression for Alexandria?

We have been involved in this sector since 1998, when we had only been a public company for one year. However, the mega-mergers in the agricultural field that have occurred over the past two years have made it clear that the only way to disrupt the entire farm-to-table system is by spawning a whole new system of startups in the agtech area. We think now is the right time.

It has been in the works for a long time, but it has been catapulted by the M&A activity. We now have two or three mega agriculture companies that literally control the world's food supply, and that isn't good.

Will you discuss Alexandria's verticals?

Our business is built around four business verticals. The overarching larger vertical is real estate – the infrastructure and collaborative campuses that we build to support entities like life science and ag companies. What happens on these campuses is intertwined with our other three verticals.

The other three verticals are corporate responsibility where we focus on sustainability, philanthropy and volunteerism; thought leadership – we recently hosted our second agriculture-focused Alexandria Summit; and venture

investments where we invest in and support start-up to early-stage life science and technology companies building the next generation of therapies.

Bringing these elements together creates thriving centers that incorporate our cluster model, which guides how we select our real estate hubs, and build collaborative, sustainable campuses that enable scientific and technological breakthroughs to benefit humankind. It has really taken off and become a great model.

The cluster model has worked well for life science companies because they innovate together and they're purpose-driven around therapies – there are 10,000 diseases that have been identified and only 500 therapies to date, so we're in the early innings. These life science companies are all about trying to cure or retard disease that will help mitigate the whole healthcare burden personally and financially.

The tech sector tends to be more interested in disrupting businesses, but they also focus on enhancing the way people live and work.

The agtech industry is purpose-driven because the nutrition effort, similar to fighting disease, is bringing healthy, fresh, and cost-effective food to the U.S.

Was the cluster model built around providing a collaborative environment?

Absolutely. The life science industry thrives on that. Very few people in that industry would not want to be in a cluster; the same is true of the agtech world.

We have found that technology companies are not collaborative because they don't want other companies taking their technology or poaching their people. However, the elements of the cluster model, such as having access to top talent, are attractive to the industry and they do want to be on our campuses.

We were ahead of that curve because, historically, life science companies did not want to collaborate with institutions and other companies either. Now, the model that they have all adopted is based on our cluster model.

In the ag business, you mentioned that two or three companies control that business globally. How challenging is it to disrupt that model?

It's easier than one thinks. Bayer bought Monsanto, Syngenta got bought by ChemChina, Dow and Dupont merged, and BASF is out there.

There are a handful of dominant companies that control the whole global ag effort. What has happened because of that is that the larger they get, they can't deal with innovative new technologies so they're now looking outside to have startups and spinouts help them rethink the entire ecosystem.

A lot of people have left these companies and are now starting companies. It's a perfect time. They're embracing it, but they're not very good at it yet.

In the biomedical area, the federal government supports basic research and makes us the leader in the world to the tune of \$40 billion from the National Institutes of Health. The U.S. Department of Agriculture and the related departments spend less than \$1 billion on ag research.

China is the dominant force – they bought a number of large companies and they're tying up all kinds of agricultural sites around the world. There is a great need to step up funding for agriculture in the U.S.

Alexandria's culture, even at its size and scale, remains entrepreneurial and nimble. How critical is it to maintain that culture in order to move into new areas and adapt quickly to a changing environment?

We're almost a \$20-billion market cap company, which is hard to imagine since we started with \$19 million.

We don't have an organizational chart. When we hire, everybody tries to check their egos at the door and we try to really have a mission-driven focus at all levels of the company. That has been the secret sauce in trying to get things done.

We all make deals, but we also make the coffee, so nothing is too small to deal with. We're also big thinkers.

We encourage everyone to be super entrepreneurial and not think like they work in a structured corporation.

Will you highlight Alexandria's commitment to building a diverse workforce?

Diversity is fundamental to our culture. We don't focus on hiring a certain number of people in certain groups, we focus on hiring the most qualified candidates.

We think about who the greatest person is for the role we need, and it always works out.

I don't like a view that is focused on pure quotas. The government loves quotas, but that's not a way to operate a business.

How do you focus Alexandria's corporate responsibility efforts?

I work specifically on our philanthropy and volunteerism efforts. We see this as a critical role in helping our mission to advance human health. We focus on four core areas: first, biomedical research to help discover drugs and new technologies that will help cure disease. We're funding some of the premier biomedical research institutions across the country in helping to bridge that gap between basic science and translational research and also supporting some translational research.

The second is STEM education – without the next generation of scientists and computer programmers and engineers, we're at a loss to imagine where our innovation industries will go. STEM education is extremely important to us, so we fund a variety of efforts. For instance, in New York City, we're a founding supporter of Computer Science for All. That is an initiative to bring computer modules and computer science education to every single New York City public school student by 2025. That is 1.1 million students every year. Kids don't have computer science classes even through high school – it's shocking. This is a really scalable effort and it is being run by Fred Wilson of Union Square Ventures and is a really effective program.

In addition to biomedical research and STEM education, we also do a lot in our local communities – the communities in which we

live and work and in which our tenants live and work. That encompasses everything from school supplies for kids in a local underserved school to homeless shelters.

Then we also feel it's important to support military families. These are the men and women who are going out every day and risking their lives so we and our tenants can work every day and we are honored to support them and their families.

Those are the areas we focus on, but we impact those areas in a variety of ways and we try to engage our team members throughout the company.

We participate in corporate giving and we're quite philanthropic in that respect, but we have a lot of programs that allow team members to get involved: matching gifts; a volunteer rewards program that rewards those who volunteer on their own time; quarterly engagement opportunities so every office has a volunteer opportunity each quarter at a local charity; and, of course, volunteer time off in the form of two paid days a year for folks to volunteer at a charity of their choice.

One of the more interesting programs we launched when we revamped our philanthropy and volunteerism program a year and a half ago is a program we call Alexandria Access. It's a program that allows our 400 employees to access Alexandria's network of expertise. After over 25 years in the industry, our various executives have an amazing network, which we have developed through our summits and our real estate, as well as through our venture investments. When families or their loved ones are facing illness or injury and can benefit from some guidance, we have a mechanism here for them to reach out and be connected with an expert who can, hopefully, offer them a second opinion or help them get in to see a doctor they might not otherwise have been able to see. It's a really fabulous benefit for people when they're unfortunately in need of something like that.

All of these efforts support our mission, and they're core to the culture here and to all the employees' everyday experience as an Alexandria team member.

Is it difficult to make long-term investments with the short-term, quarter-to-quarter pressure for results?

It's not hard to do it because we're uniquely focused. We're not a real estate company that is wrapped up in the deal or the financial return. We started this whole life science real estate niche with the purpose of helping to solve human diseases.

This is such a natural part of what we do – we think of it every day; it is not something we strain to do. It's part of our DNA.

I spend a lot of time as a board member of mission-critical social responsibility organizations, and one of the most important things each of us can do is to participate in a number of ways with such things.

We don't even give it a second thought – it's part of our culture and DNA. ●