



LIFE IMITATING SCIENCE: ARRANTA BIO'S COMMITMENT TO CORPORATE SOCIAL RESPONSIBILITY AND DIVERSITY

→ BY MELANIE CERULLO, AND SUSAN SURABIAN, ARRANTA BIO

As a pioneering CDMO innovating solutions in supplying live biotherapeutics, Arranta Bio is at the forefront of some of the most exciting advances in the microbiome space. Since the inception of the human microbiome project in 2007, the number of academic publications and active patent families around the microbiome has grown exponentially.¹

Problems within the human microbiome have been shown to contribute to the development of a myriad of health problems that are not exclusively associated with gastrointestinal disorders and food allergies, but also affect organs and systems throughout the human body, including cardiovascular, metabolic, autoimmune, and neurological disorders, as well as diabetes and cancer.²

Estimates of the microbial population in the human body is between 10 and 100 trillion, and the genes within these microbes outnumber the genes in humans by a factor of 150, sometimes being referred to as the “second genome.”³ Established at birth, the microbiome develops as humans grow and is affected by diet, the use of antibiotics, genetics, and various environmental factors, with around 80% of the species being beneficial. However, when the microbiome enters a state of imbalance or dysbiosis, systems may begin to stop functioning properly, and researchers around the world are studying ways to harness gut microbiota to treat a variety of conditions.

ALIVE Biotherapeutic Products® (aLBP) is Arranta's trademark for the world-class LBPs we develop, leveraging over ten years of process development expertise in manufacturing aerobic, anaerobic, and spore-forming organisms. ALIVE is an acronym for Accelerated development, Long-lasting stability, Immediate release and recovery, Viable, high-activity, and Efficient, scalable process. Headed by a management team and technical experts with a proven track record in both process development and contract manufacturing – from fermentation to lyophilization and encapsulation of live biopharmaceuticals – Arranta Bio offers the knowledge and resources necessary to help clients develop and manufacture promising new microbiome therapies to meet patient needs. We continue to invest heavily in both process development and cGMP manufacturing capabilities for the supply of clinical trial material in the microbiome space, as well as investing in commercial-ready facilities primed with the capacity and specialized expertise to bring novel medicines to patients.

Perhaps equally important to Arranta Bio's commitment to bringing efficacious microbiome therapeutics to market is

our commitment to making a difference through corporate social responsibility (CSR) initiatives. What we do is as important as how we do it. These principles not only aim to make Arranta Bio a heterogeneous team of employees from all walks of life, but to extend that heterogeneity to industry and science, technology, engineering, and mathematics (STEM) programs holistically.

MORE THAN JUST MARKETING

We believe that, in order for life sciences to continue to thrive, a commitment to equity, diversity, and inclusion cannot be “just another initiative.” It must be the cornerstone of company policy, entrenched in every fiber of our DNA from the top down, and to manifest itself not only in recruitment, but also in professional development, retention, and promotion strategies. We also select vendors who have – and practice – the same diversity principles. Currently, we have prioritized extending our reach and message into our communities. In addition to being the right thing to do, numerous studies have demonstrated that, the more diverse a business is, the more successful it is – and even more importantly, in such a competitive environment, companies cannot thrive without drawing from the best talent on earth, regardless of their gender, race, ethnicity, ability, religion, socioeconomic standing, or other differences.

This approach has a metaphorical resonance with the therapeutics we manufacture; the human body thrives on a healthy, diversely balanced microbiome to function properly, and our company culture and demographic makeup is no different. There are correlations between overpopulated and underpopulated microorganisms in the microbiome that contribute to disease, and optimal diversity is required for systems and organs to function properly. On a biological level, a diverse microbiome contributes to our overall health – juxtaposing this scientific knowledge with our approach to CSR is not a difficult bridge to build; we believe having diverse backgrounds and opinions makes our business stronger and more competitive and leads to greater innovation.

ARRANTA BIO CARES

Arranta's CSR program is built on three primary pillars. The first pillar is centered around diversity and inclusion, driven by

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making our recruiting pipeline as diverse as possible educating ourselves with and engaging in our communities to encourage minorities and under-privileged individuals to pursue careers in life sciences. The second pillar involves our community outreach efforts, including the causes and charities Arranta supports through donations and volunteering. The third pillar aims to ensure that our vendors align with our priorities and show a commitment to diversity and sustainability within their respective organizations, so that we are procuring materials and services from vendors who share our vision and values as well as implement internal sustainable practices.

In addition to choosing vendors that align with our mission and vision, Arranta Bio also works internally to partner with organizations that allow us to impact those around us and provide employment opportunities across socioeconomic boundaries. We celebrate being an equal opportunity employer, bringing together different cultures and ethnicities to support our mission of becoming the best-in-class CDMO. Arranta Bio's CEO Mark R. Bamforth has made diversity a defining feature at the company. “We can be paralyzed by the challenges and divisions in our society. We can feel overwhelmed until we recognize that there are many actions we can take to make a difference. It's our duty to open doors and support those of color and from



About ALIVE

Echoing the ALIVE brand for our LBP products, we use ALIVE to describe our values as a company:

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- L - Long-lasting stability**
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- E - Efficient, scalable process**



diverse backgrounds to pursue a fulfilling career in life sciences,” he noted. The Arranta Bio CSR vision statement reads, “Arranta Bio is a model corporate citizen through a welcoming, diverse culture that promotes racial, social, and gender equality. We believe in making our community stronger through employee volunteering and giving back.”

From our two locations in Watertown, Massachusetts and Gainesville, Florida, we have made connections with local organizations that are aligned with our CSR goals. Arranta Bio is a member of MassBio and a supporter of MassBioEd, an educational branch of MassBio and a leader in diversity and inclusion in the life sciences. MassBioEd works to build more diverse workforces through collaboration with various life science organizations who work in the state of Massachusetts to provide grants and opportunities to underserved and underrepresented groups. We also work with BioFlorida, which represents 6,700 establishments and research

organizations in BioPharma, MedTech, HealthIT, and BioAg that collectively employ nearly 94,000 Floridians.

We also partner with Year Up, an organization that seeks to close the opportunity gap by connecting young people from diverse backgrounds to training and internships and proven paths to successful careers. We are partnered with American Corporate Partners (ACP), a nonprofit organization engaged in corporate career counseling for veterans that helps connect them to career opportunities. We are establishing programs with local colleges, high schools, and middle schools, to provide classroom presentations about microbiome and biotechnology in order to raise awareness of the various careers in life sciences. Through uniting the human and financial resources of Life Science companies and industry leaders, we support service organizations that do the best work in fighting poverty in our communities, such as Life Science Cares, an organization that coordinates the efforts of the Life Science industry to eliminate the impact of poverty on our neighbors in the greater Boston area.

Arranta Bio believes that in order to build a more diverse workforce, we need to start educating young people about the opportunities in life sciences and providing resources to train the younger generations for these roles. We need to debunk misconceptions about a Ph.D. or even a bachelor’s degree being the prerequisite for a fulfilling career in life sciences. The life sciences industry would be well-served to focus on identifying and training individuals on job-specific competencies rather than focusing on college degrees for many positions. In addition to partnering with school-based organizations, we also empower our employees to volunteer in the community. Each employee can take paid time off to volunteer for causes that are important to them, above and beyond their paid vacation.

RECRUITING OUTSIDE OF THE BIOTECH BUBBLE

Like other biopharmaceutical companies, Arranta Bio has certain roles that require undergraduate or graduate degrees or previous experience; We also recognize that there are many roles within the company where we can recruit and train individuals from different backgrounds based on

the core competencies required for the role. While some professions, locales, and courses of study have some level of diversity inherently built into them, it can be difficult to ensure a fully diverse workforce in the life sciences. For example, there is a robust talent pool of Caucasian and Asian candidates in these fields due to the demographic make-up at colleges and universities. However, African American and Latino individuals are underrepresented in our industry. This may be attributed to multiple factors, including the current requirement to have a degree in science for entry into the life sciences workforce, lack of resources for STEM programs during elementary and secondary education, and a general lack of awareness and exposure to career paths in life sciences. We understand the challenges to building a diverse workforce extend further back than the candidate pool from which we are recruiting, and as such, our approach at Arranta is to influence diversity in STEM as early and as often as we can. By educating high school and middle school minority students on careers in STEM and encouraging students to pursue such careers, Arranta strives to help create training programs that can produce high-quality candidates outside of the traditional college programs. Thus, Arranta is working to cultivate tomorrow’s talent pool, which we hope will set a new bar for live science diversity.

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Recruiting for Arranta Bio’s Gainesville, FL facility comes with a unique set of challenges, particularly given that the local pool of candidates with extensive biotech industry experience is limited, by contrast to the candidate pool in Massachusetts. This illustrates the importance of a corporate philosophy that emphasizes competency-based hiring. When we have an open position, we evaluate the baseline skills needed to do the job, and fully invest in training our employees to carry out the specific tasks required to be proficient. This is a massive shift from the traditional hiring practices in life sciences, which are generally focused on the need for prerequisite experience and degrees. If we can find critical thinkers with the ability to execute the physical techniques required for a role and the aptitude to operate in a GMP environment, we can train them on our platform-specific tasks and deliverables, allowing us to widen the candidate pool exponentially and staff our facilities with a foundational mindset of diversity and inclusion.

FOSTERING PROFESSIONAL DEVELOPMENT OPPORTUNITIES ACROSS LOCATIONS

Arranta Bio’s training and development work streams include leadership training across all levels, with fundamental skills training initiatives to develop current and future managers. Additionally, we launched career development plans for every employee at Arranta Bio to help each employee align their career development interests and goals. The focus of these plans is on creating a roadmap for developing skillsets now for a position that the individual wants to grow into in his or her next role. We also launched a mentorship program so that members of the leadership team can mentor our more junior employees and help steer them on a path to achieve their future goals at Arranta Bio.

We work to ensure that these efforts are available across departments and locations. Many companies face challenges pertaining to cross-location cultural continuity, but the foundation of our cohesive efforts is a transparent, two-way communication and feedback loop. COVID-19 presented a unique opportunity in the midst of uncertainty to make employees at Arranta Bio feel safe, connected, and heard. In compliance with expert guidance, we quickly pivoted to ensure we provided a

safe work environment for our employees. These endeavors included a shift to remote work for many of our employees, which also presented opportunities to connect staff at our Watertown facility to our Gainesville facility through weekly virtual town hall meetings and twice-weekly “lunch & learn” sessions where information and feedback and ideas were freely exchanged.

We launched an intranet site aimed at ensuring that employees have all the necessary resources at their fingertips as a part of our CSR initiatives. We have consciously and intently developed communication processes to ensure consistency and collaboration across both our facilities in Massachusetts and Florida so that we can achieve our goals. related to diversity and inclusion in recruiting, professional development, and career advancement are synergistic across sites.

Arranta Bio is dedicated to celebrating diversity within our company. We hold ourselves to the highest standards, and our internal and external processes follow our diversity mission. We expect to hire 200 employees over the next two years and are committed to addressing barriers that exist for minorities and welcome diverse employees who share our core values to be a part of our team. ■

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ABOUT THE AUTHORS



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Melanie Cerullo is responsible for Arranta’s Quality and Regulatory functions, including Quality Assurance and Quality Control. Ms. Cerullo has more than 23 years of experience in QA and QC in GMP manufacturing operations. She was formerly the Vice President of CMC and Quality at Wave Life Sciences, where she built the Quality organization to support early phase internal manufacture and quality oversight of CDMOs, managed the Analytical Development and Drug Product Formulation teams, and established the CMC product development program for Wave’s clinical portfolio. Ms. Cerullo holds a BS in chemistry from Rhode Island College and a MS in quality assurance and regulatory affairs from Temple University.

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Susan Surabian joined Arranta Bio in 2019 as one of its first employees. She serves as Arranta Bio’s Corporate Social Responsibility Leader and The Executive Assistant/Office Manager for the Arranta Bio Leadership Team. In both her personal life and business life, Susan is a life-long champion of equality and inclusion has dedicated the last 15 years to help serve the disadvantaged populations and children with special need through volunteering, community outreach, advisory boards and mentoring. Susan is an advocate for making radical changes to protect the environment through sustainability practices. She believes diligence is the key to improving the future of the life sciences industry and beyond – in both the workplace and in employees’ everyday lives.

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