Search for the President
Boyce Thompson Institute
Ithaca, New York

The Search

The Boyce Thompson Institute (BTI or "the Institute") seeks an accomplished scientist and visionary leader to serve as the next President. This individual will join a highly respected organization and an outstanding team of scientists and staff to advance the mission of scientific discovery in biology and the application of science to improve agriculture, protect the environment, and enhance human health.

As an independent research institute, BTI is a nimble organization, allying with scientists and organizations around the world to pursue creative and cutting edge plant science research that spans genomics, bioinformatics, chemical biology, systems biology, and cell biology. BTI is situated on the campus of Cornell University and maintains a close and collaborative relationship with scholars at Cornell, creating a larger community dedicated to science with opportunities for graduate research and interdisciplinary research collaborations. All BTI faculty are also adjunct faculty at Cornell in areas such as plant pathology, plant biology, entomology, plant breeding and genetics, molecular biology and genetics, and chemistry and chemical biology. BTI's 131-member faculty and staff are at the forefront of science, and throughout its history, it has made a profound impact on societal issues ranging from food supplies to improvements in agriculture and human health. The vibrant community of postdoctoral associates, graduate students, research assistants, and other lab personnel add to the rich culture of BTI, and trainees go on to successful careers in academia and the public and private sector.

As BTI looks to the future, the next President will have the opportunity to extend its prominence in the field and grow its impact. BTI seeks a leader who can work across the organization to develop a shared vision that embraces the rapid changes in the field. The President will continue to empower scientists to advance fundamental discoveries in science while also nurturing the exciting progress in entrepreneurial ventures and the application of BTI science. As the CEO of an independent organization, this position ensures the strong financial management of BTI's $90 million endowment and $20 million operating budget while helping to expand BTI's fundraising. The President must set the tone and support a culture

that respects and values the contributions of the staff and organization to advance a firm commitment to the values of diversity, equity, and inclusivity. This position requires an experienced scientific leader who brings credibility in the field as well as administrative skills sufficient to oversee an organization of BTI's scale and complexity.

History

In 1920, William Boyce Thompson observed that agriculture, food supply, and social justice were all linked. This conviction and his passion for science-inspired his philanthropic pursuit to establish an institute for plant research to advance and communicate scientific discovery in plant biology.

Thompson endowed the Institute with $10 million of "seed" funding to enable the Institute to acquire the very best scientists, equipment, and supplies and to establish relationships with industry and the government to help finance research. The licensing of Institute patents with companies was intended to balance funding during years of lean government support, as Thompson believed that commerce and industry are beneficial to society and that commercial development of research results would spread the Institute's discoveries. The integrated view of scientific discovery in partnership with non-profit, government, and industry partners to have maximum impact on society continues to drive BTI today.

Click here to learn more about the history of BTI and to read more about William Boyce Thompson, his life is chronicled in his 1935 biography The Magnate.

BTI and Cornell

While BTI maintains a strong identity as an independent nonprofit organization with its own mission, values, and endowment, it is formally affiliated with Cornell University. Its location on the university campus facilitates a collaborative association with the College of Agriculture and Life Sciences (CALS) and other units across campus. This Cornell-enrolled graduate students perform their research in BTI laboratories and undergraduates have research and education opportunities with the BTI faculty and staff. Many BTI board members have connections to Cornell, which supports the health and vibrancy of the partnership. Working closely with leadership at Cornell, BTI strives to create synergies and complementarities, rather than duplication, that highlights its distinctive contributions to science while also building on the pre-eminence of the plant sciences associated with the Ithaca campus.

Facilities and Resources

BTI boasts state-of-the-art facilities that enable world-class science, including an on-site Plant Growth Facility, Plant Biotechnology Center, Mass Spectrometry Center, Computational Biology Center, Plant Cell Imaging Center and a new Phenotyping Facility. Another integral part of BTI scientific operations is the wealth of resources offered through the Mechanical Shop, Centralized Services, and Internal Services. BTI operates and staffs its own facilities and offers a full set of administrative services including grant management, human resources, and information technology support. BTI has been listed consistently among the top 25 places to work in New York State.

BTI is also home to Institutional Advancement, Education and Outreach, Technology Transfer and Licensing (including New Business Development and a new translational science program), and Bioinformatics Consultation and Workspace. These departments assist scientists and staff with outreach, fundraising/sponsorship support, communications, tech transfer, and bioinformatics support.

Strategic Plan

The Institute is nearing the conclusion of its current strategic plan, which was developed through an inclusive process that engaged BTI faculty, staff, and the Board of Directors. The strategic plan outlines five initiatives:

1. Reimagine professional development, workplace culture, succession, and hiring.
2. Reimagine the discovery research environment and infrastructure.
3. Execute robust plans for relational and financial resource growth.
4. Strategically strengthen the mutually beneficial relationship with Cornell.
5. Translate discoveries to real-world applications and value.

The next President will have the opportunity to assess the current strategies and collaboratively lead the development of the upcoming plan.

Research

BTI's research aims to speed the development of sustainable agriculture and healthier food production through discovery science related to understanding mechanisms plants use to grow, defend themselves from disease and insects, conserve water, adapt to a changing climate, and react to stress. BTI researchers have made discoveries that have led to the first plant-made vaccine to gain regulatory approval, development of an insect cell line used for production of a vaccine to prevent cervical cancer, new small molecules to improve plant and human health, increased understanding of plant disease resistance, new genes to increase flavor and resilience of crops, and many other benefits to humans and the environment.

The Institute currently has 16 faculty members, including two members of the National Academy of Sciences and one Howard Hughes Medical Institute Faculty Scholar. BTI researchers publish about 125 research papers in peer-reviewed journals each year. The Institute receives a breadth of funding for sponsored research from more than 20 different organizations, including foundations and government entities.

BTI's high-caliber facilities are continually geared towards the future of plant science research. For example, throughout the genomics boom, BTI has built world-class expertise in plant bioinformatics among faculty members and the team that operates the BTI Computational Biology Center (BCBC), driving discoveries of new genes that can be used to screen and breed more resilient and healthy crops. Transforming plants with modern genetic engineering and editing tools like CRISPR will be essential to the health of the Earth and humankind in the future, and BTI's Plant Biotechnology Center has a well-earned reputation one of the best plant transformation facilities in the U.S., with potential for expansion. Comparative metabolomics is a relatively young scientific field that has the potential to yield incredibly valuable small molecules, such as pharmaceuticals and agrochemicals, and BTI has built a state-of-the-art mass spectrometry center to lead the charge on this discovery research. Looking further into the future,

BTI is currently building a large-scale phenotyping facility, which will speed discoveries that are important to increasing plant resilience in the face of a changing climate.

BTI's culture has been built around the belief that the future of science is collaborative, and the investment into the shared facilities are evidence of that belief. A significant number of grants awarded to BTI are collaborations between two or more BTI researchers. Researchers can collaborate to transform a plant with a genotype of interest, study its phenotype under various conditions, and make genomic, proteomic, transcriptomic and metabolomic discoveries, all under one roof. Another example of the importance of collaborations to BTI research is the recent innovative "cluster hire" of three faculty members who showed collaborative tendencies. While most cluster hires focus on a specific field of research, BTI created a unique hiring process that identified individuals who had a propensity to collaborate with researchers outside of their own disciplines.

BTI's research has the potential not only to help increase the food supply, but also to enhance the nutritional value of foods in developing worlds, to reduce the need for fertilizers and pesticides, and to develop vaccines. Specific research areas include biotic interactions, cell biology, chemical biology, enabling technologies, ensuring impact, genomics and systems, and stress responses. BTI's Computational Biology Center enables scientists to develop and utilize computational approaches to address important questions related to plant biology.

For more information, visit faculty websites and view the comprehensive list of publications.

Education and Outreach

BTI is uniquely positioned to prepare students, teachers, and early professionals for careers in science through our robust programming. Hands-on training is a primary Institute directive, with active efforts to broaden participation and inspire the next generation in science discovery. BTI hosts a range of professional development programs and organizes impactful educational experiences, including federally funded Research Experiences for Undergraduates (REU), High School Research Experiences and Workforce Development, and Outreach to K-12 classrooms. Additionally, BTI prepares graduate students and early career professionals for multiple career paths through an initiative known as "T-training" through its Postgraduate Society (PGS). T-training teaches skills such as networking, tech transfer, and science communication that can facilitate smoother transitions into a variety of career paths. T-training is just one part of a larger plant science directive known as the Decadal Vision, which prioritizes key goals for the field. In addition to T-training, these goals include improving the knowledge and applications of plant genomes and plant-derived chemicals, and the ability to find answers in a torrent of data. An additional community outreach program is the *Physalis* Improvement Project, which aims to further explore the cultivation *Physalis* species by crowdsourcing information from volunteer citizen scientists throughout the United States.

Workforce Advantage Program – Launched in the summer of 2019, the BTI Workforce Advantage (WFA) program is a unique, immersive seven-week internship that provides high school students with work experience in varying operational areas in order to build a workforce development pipeline equipped to support scientific research "beyond the lab."

As part of the program, each high school intern is appointed a mentor to assist and guide them in their selected area of work, which have included positions in BTI's Advancement, Procurement, Information Technology (IT), Finance, Lab Services, Greenhouse, Computational Biology, and Mechanical departments. The interns work alongside and share in many of the same professional development activities as their mentors to gain new, and hone existing skills. These tools and professional guidance prove invaluable to the participants, helping them to become well rounded and successful individuals as they progress on their career journey.

Financial Overview

BTI is in a strong financial position. With an annual budget of $20 million, only 18 percent is dedicated to administrative expenses. Total net assets are $80 million as of November 2021. During 2020 FY, BTI's revenue from grants and contributions was over $10 million. Investment income was nearly $600,000. The Institute's current endowment is over $90 million. A significant focus for the next President will be to continue to build our network of donors and increase major gifts in support of BTI's mission.

Governance Structure

The BTI Board of Directors is the fiduciary group overseeing the financial success and sustainability of the Institute, assuring that the Institute has adequate resources to advance its mission. The Board also provides strategic leadership and scientific oversight in partnership with the Scientific Advisory Board.

The 19 board members serve three-year terms with a maximum of three terms, with four to five members being nominated by the President of Cornell per the BTI Bylaws and the affiliation agreement.

The Scientific Advisory Board, consisting of board members and other distinguished scientists, conducts an annual overview of the Institute's research programs.

Faculty and Staff, BTI's 131-member community is exceptional in their passion and dedication to the Institute and its mission. BTI faculty and their laboratory staff are at the forefront of science. Members of BTI not only ensure that the needs of the Institute and faculty are met, but they are facilitators and creators of an open and collaborative culture. Twenty-five percent of all faculty and staff identify as a person of color.

The Role of the President

The President reports to BTI's Board of Directors and is responsible for effectively leading an organization of dedicated individuals. The President will oversee the day-to-day operations of the Institute, guiding talented senior leadership and administrative teams including the Chief Operating Officer, Director of Human Resources, and the Philanthropy and Engagement Director. The Director of BTI Computational Biology Center and all faculty also report to the President. The President oversees the hiring of all new faculty and has the flexibility to employ novel approaches to hiring such as the implementation of cluster hiring programs.

The next executive leader of BTI will serve as the principal liaison to Cornell University and is the lead ambassador to other academic institutions, partner organizations, and community stakeholders.

Key Opportunities and Challenges

Specific areas for leadership and impact for the next President include:

Inspire, unite, and energize faculty and staff around the next chapter of success – Building off its current strategic plan, the next President will lead all constituencies in a thoughtful and probing analysis of Institute, its future, and priorities across key mission areas. The President will ensure that the vision inspires the faculty, staff, and Board to achieve even higher levels of excellence and that all programs, hiring plans, investment areas, and activities are consistent with the implementation of that vision.

Sustain and enhance resource development – The President will actively pursue additional resources to support the strategic. Working with the Board and development staff, the President will work to identify and grow the pool of prospective donors and expand individual giving in support of its mission. At the same time, the President will ensure the ongoing strength of federal, state, industry, corporate, and private foundation support. The next President must ensure that BTI uses its resources wisely to protect the long-term sustainability of the endowment.

Nurture strategic alliances – The President will partner with leaders at Cornell to create a thriving intellectual community across the two institutions that minimizes administrative and cultural barriers to collaboration. In addition, the President will work to connect BTI across the University in ways that lead to fruitful interdisciplinary collaborations beyond plant sciences. The President will also strengthen relationships with industry and corporate partners as well as other aligned academic and research organizations and federal agencies.

Lead and actualize the principles of diversity, equity, and inclusion – The President must be a passionate champion to increase representation in plant biology and will seek an active role for BTI in that goal. Ongoing attention and commitment to the recruitment of a diverse scientific and professional workforce and nurturing a welcoming, respectful, and inclusive climate are clear priorities for the next President.

Invest and develop faculty and staff – The next President will be an astute professional with strong executive management skills to ensure a positive work culture that utilizes the talents of the entire team. Embedded in a small, independent research institute, the President is expected to be a visible presence with scientific and administrative staff. They will ensure a structure that enables external engagement with close consultation internally and lead the Senior Leadership Team to be a high-performing unit that executes on strategic goals.

Manage and advance scientific enterprise – The President must encourage the ongoing success of BTI scientists. The President also stays abreast of trends in the field and will work with the Director of Research to identify new opportunities for BTI science. This includes positioning BTI for participation in larger, multi-institutional center scale grant activity and interdisciplinary team-science collaborations. While the

scientific programs emanate from the faculty, the President plays an important role in the strategic hiring of new scientists that will profoundly impact its long-term future.

Qualifications and Characteristics

For this important role, BTI seeks an exceptional leader who is passionate about the Institute's research and mission; committed to standards of excellence; supportive of its community connection and relationship with Cornell; and farsighted about the future potential of BTI. In addition, the President will have many, if not all, of the following characteristics:

- A research scientific background with a Ph.D. in the sciences;
- Progressive management experience and record of success within an industry, government, nonprofit higher education, or other research facilities;
- A track record of supporting competitive grant proposals, including as an investigator, and organizing successful teams to pursue funding opportunities;
- Current awareness of research trends and federal funding directions; networks and relationships with sponsoring agencies;
- A track record that demonstrates a dedication to diversity, equity, and inclusion and the ability to promote, achieve, and embody BTI's commitment to these values;
- The ability to be a strong advocate for BTI and its core research mission in the context of the strategic commitment to partnering with Cornell and broadening BTI's public profile;
- Experience with or a demonstrated willingness to engage as an effective fundraiser, securing resources from a variety of sources;
- Familiarity with research space planning, including planning and oversight of shared facilities and research resources;
- A talent and track record for recruiting, developing, and inspiring a creative and diverse faculty and staff and a commitment to each parties' professional growth;
- Superb interpersonal skills and demonstrated ability to listen effectively and collaborate with diverse constituencies;
- An entrepreneurial and creative approach that is balanced by a deep appreciation and understanding for basic scientific research;
- The personal integrity, credibility, and experience to earn the trust and confidence of the Board, faculty, staff, major donors, program partners, and other key constituencies;
- A proven tolerance and nimbleness when faced with ambiguity;
- Management style that is open, transparent, and collaborative yet results-oriented;
- Ability to communicate effectively to BTI's diverse community of scientific faculty and administrative staff.

Applications and Nominations

All inquiries, nominations/referrals, and applications (CVs and letters of interest) should be sent electronically and in confidence to:

John Muckle, Partner
Stephanie Simon, Associate
Alexandra Lolavar, Associate
Isaacson, Miller
https://www.imsearch.com/search-detail/S8-389

BTI is committed to building a diverse community and encourages members who identify as underrepresented minorities to apply. Experience that contributes to the diversity of the institute is appreciated.