

May 8, 2021

To the Selection Committee for the Director of CARIE at Spur:

I am writing to express my enthusiastic interest in the position of Director of CARIE at Spur. As documented in my CV, I am a long time administrative leader with a history of growing industry engagement, increasing external financial support and fostering public/community education. I am a high energy, nimble leader committed to transparency, adaptability and collaboration. Appointed Department Head of Plant Pathology at the University of Minnesota in 2013, I lead all aspects of a complex academic unit. In 2014, I launched and have since co-led the Stakman-Borlaug Center, fostering interdisciplinary research and engagement. My significant accomplishments include:

- Continuous assessment and improvement of organizational structures, administrative policies and administrative practices to further the mission of our institution
- Expansion of our departmental research portfolio and student training opportunities
- Creating and managing K-12 and public/community educational programs and programming
- A culture of diversity, equity and inclusion supporting mission-oriented successes
- Significant expansion of administrative staffing, supporting our land grant mission
- 700% increase in annual philanthropic donations since 2013
- Innovative industry partnerships yielding an embedded industry lab, student fellowships, research funding and a platform for public/private interactions on a global scale
- Securing mission-focused external funding in excess of \$7 million since 2013

Below I elaborate on my professional philosophies, skills and experiences directly aligned with the qualifications you expect in the Director of CARIE.

## **EDUCATION & PROFESSIONAL PREPARATION.**

*This section addresses:*

- Required: Earned Master's degree in agricultural sciences; Preferred: Earned Ph.D.
- Required: ≥ 5 years of leadership; Preferred: ≥ 5 yrs as head at a land grant institution
- Required: Hold a valid driver's license

My education and professional experiences are steeped in the land grant ethos. Since 1986, I have been continuously associated with agricultural research, teaching and outreach at land grant institutions. I completed undergraduate studies at Michigan State University (B.S. with Honors, 1990 - Horticulture); graduate degrees at the University of Wisconsin (M.S., 1992; Ph.D., 1994 - Plant Breeding & Plant Genetics); and postdoctoral positions at Rutgers University and the University of Wisconsin. I joined the University of Minnesota as an assistant professor of plant pathology in 2002. Since then, my research has focused on the molecular biology of plant-microbe interactions, a field poised to answer basic evolutionary and ecological questions with direct application to agriculture and environmental sustainability. My teaching assignments include molecular plant pathology and science communication and I have taught 1-3 classes in most semesters since 2003. I earned promotion to Associate Professor with Tenure in 2008 and promotion to Full Professor with Tenure in 2013. Also in 2013, I assumed the role of Department Head, a position I still hold. Detailed elsewhere in this document, I am directly responsible for all operational, administrative and strategic aspects of our department, including overseeing personnel, organizational structure and budgets/finances. In 2014, I led a collaborative strategic

effort to found the Stakman-Borlaug Center, an innovation platform positioned to foster interdisciplinary research and outreach and to develop and maintain public-public and public-private relationships. I have served as Co-Director of our innovation center since its inception. I hold a valid driver's license.

### **ADMINISTRATIVE AND MANAGERIAL LEADERSHIP.**

*This section addresses:*

- *Preferred: Demonstrated supervision/management, communication/interpersonal skills*
- *Preferred: Demonstrated experience allocating, directing, monitoring large scale budgets*
- *Preferred: Demonstrated fiscal responsibility, adaptivity, creativity, innovation*

Department Head since 2013, I am the chief administrative and financial officer for my unit, comprising 32 faculty, ~25 research staff, 25-30 graduate students and up to 50 undergraduate researchers. I am directly responsible for supervision and annual review of all faculty, including mentorship, promotion and tenure procedures and salary increase decisions. Also reporting directly to me and working closely with me on a daily basis is an amazing, committed administrative staff. In 2013 I inherited a traditional administrative team of 2 individuals. Since then, I have radically restructured our administrative approach, focusing on contemporary needs and functional capabilities. Today, our administrative team flexes between 5-11 employees (currently: 6.5 FTEs), with some positions shared between the department and our center. My approach provides adaptability to meet the changing needs of students, staff and faculty, professional growth for staff, and continuous process innovation. These changes yielded new staff capacity in alumni and donor relations; communication; outreach support; experiential learning; growing industry partnerships; grant discovery and project management; and student professional development. I am creative and effective in managing and growing departmental resources to achieve our mission-focused goals. Resources for our department include ~\$2 million in annual state and federal allocations, >40 endowment funds with a combined principal in excess of \$10 million; annual expenditures of \$7-10 million; and annual external research funding of approximately \$5 million from a wide variety of commodity, state, federal, industry and philanthropic sources. I have been aggressive in seeking external funding from competitive state and federal sources, philanthropic groups, individual donors and industry. Since 2013, I have raised more than \$7 million to support the mission of our unit. This includes a 700% increase in annual giving and nearly \$3 million in competitive grant funding. Among innovations, I brokered establishment of an industry lab in our academic building, providing more than \$700,000 in facilities updates, nearly \$2 million in rental fees over a 10 year period, opportunities for interaction that have led to new research funding and collaborations, and in-place industry internships for our students.

### **MISSION-ALIGNED STRATEGIC LEADERSHIP.**

*This section addresses:*

- *Preferred: Significant leadership experience in new program and unit development*
- *Preferred: Experience guiding an organization's mission through education, research, and stakeholder outreach/engagement*
- *Preferred: Experience developing/implementing interdisciplinary programs*
- *Preferred: Experience in collaborative priority setting and decision making*

An effective university administrator understands the land grant mission, institutional goals and priorities, and the culture of students, staff, faculty and external stakeholders. I am a nimble administrator committed to the principles of shared governance and outside the box thinking; collaboration and creativity are among my strengths. Below I offer 3 examples of how I work within a collaborative, shared governance framework to launch new interdisciplinary programs, further institutional mission and effectively integrate education, research and engagement.

**Stakman-Borlaug Center.** Recognizing that administrative structures too often lead to siloing of research and outreach efforts, I led a collaborative strategic planning effort to design and launch an interdisciplinary innovation platform. This effort included input from college leaders, faculty and external stakeholders. The result, the [Stakman-Borlaug Center](#), launched in 2014 and is positioned to foster interdisciplinary research, outreach and education; attract industry, government, NGO and academic research partners; increase financial support from industry, philanthropic entities and grant sources; and pursue “high risk, high reward” opportunities. I have served as Co-Director of the Stakman-Borlaug Center since its founding, overseeing all administrative functions and coleading an evolving portfolio of research, outreach and student training efforts. Center initiatives and successes are detailed in my CV and highlighted elsewhere in this document.

**Plant Disease Clinic Business Model, Increasing Student Credit Hours and Enhancing Experiential Learning.** Working with my faculty and deans, I developed and implemented a new administrative/business model for our [Plant Disease Clinic](#), a public-facing diagnostics laboratory. Previously, our Clinic operated solely on user fees and grants. With no funding from our institution, the Clinic was frequently in a tenuous financial position. I recognized the need to diversify funding streams. Appointing a Teaching Assistant Professor as both instructor of plant pathology courses and Director of the Clinic allowed us to capitalize upon the seasonality of Clinic functions to expand undergraduate and graduate classroom teaching during fall and spring semesters and better integrate student experiential learning opportunities into daily Clinic activities. This model resulted in a >50% increase in departmental student credit hours, providing the Clinic stable financial support. The Clinic has become a venue for undergraduate experiences, yielding a steady pipeline of new graduate program applicants. Today, the Clinic consistently operates in the black, is an integral part of the National Plant Diagnostic Network and serves as the face of the department for its many external stakeholders. Our Clinic Director has grown into a nationally-recognized teacher, winning our college’s Distinguished Undergraduate Education Award in 2018 and the Distinguished Teaching Award from the American Phytopathological Society in 2019. He was promoted to Associate Teaching Professor in 2020. In 2020 I further expanded my administrative support team, appointing a 75% position with primary research safety and space management capacity. Trained in plant disease diagnostics, the individual in this position also works on an as-needed basis in the Plant Disease Clinic, providing additional technical support in the busy summer months.

**Interdisciplinary Undergraduate Program of Study.** Aligned with collegiate goals of increasing student credits hours and departmental goals of raising the visibility of plant pathology as a career choice, in 2014 I led a collaborative effort to design and launch the interdisciplinary Sustainable Plant Health program of study within our undergraduate Plant Science major. Working with our Associate Dean of Academic Programs and department heads and faculty in Plant Pathology, Entomology, and Soil Water & Climate, I defined a core set of courses taught across the three departments that collectively prepare students for careers as comprehensively trained plant health

professionals. The program of study has been successful, attracting students to the major and contributing to year-over-year growth in enrollment in the plant sciences.

## **LEADERSHIP IN STAKEHOLDER ENGAGEMENT.**

*This section addresses:*

- Required: Ability to develop effective relationships with diverse stakeholders

My dual roles of Department Head and Center Co-Director require working effectively with diverse populations inside and outside of our institution. Internally, I interact at every level, from student groups to the President's office. Routine collaboration with deans and department heads is essential. My role in research leadership requires frequent interaction with state, federal and philanthropic funders and state and federal regulatory agencies. The international footprint of our research portfolio (48 countries; 7 continents!) necessitates routine interactions with researchers and leaders at global institutions, NGOs and government agencies. Our research and Extension portfolio aligns with the needs of farmers and farm commodity organizations, providing opportunity for frequent interactions. I have launched multiple initiatives that have provided ongoing and meaningful interactions with industry and community groups. Industry support of graduate student research provides varied industry interactions on a routine basis. I am active in donor cultivation and alumni relations, working effectively with our college and university advancement and development staff. As Internal Communications Officer for the American Phytopathological Society, I interact with an array of government, industry and academic professionals. Below I elaborate on 2 examples of external engagement that highlight my experiences and approaches.

**An in-house industry research lab, administrative home for a federal research funding mechanism and research space for a philanthropic NGO.** Leveraging an industry relationship that I had actively cultivated since 2014, I brokered a long term lease of lab space in our academic building to PepsiCo. The agreement yielded >\$700,000 in improvements to research facilities and \$1,848,000 in funding for graduate education, student professional development and research. The PepsiCo Trait Discovery Lab opened in 2018. Co-localization of industry and academic scientists has already led to new collaborative research projects, new research funding and in-house industry internships for students. Expanding this engagement model to nonprofit sectors, we recently established the University of Minnesota as the administrative home for the USDA-funded U.S. Wheat & Barley Scab Initiative, migrating that capacity from Michigan State University where it had been centered for decades. Established in 1997, the U.S. Wheat & Barley Scab Initiative annually allocates millions of dollars in research funding to combat Fusarium head blight disease in wheat and other small grain crops. At present, we are also in discussion with a major philanthropic funder of plant pathology research about establishing an in-house NGO research lab.

**Oat Global.** Among successes for the Stakman-Borlaug Center is the establishment of [Oat Global](#) in 2015. This public-private partnership aims to coordinate oat research and Extension on a global scale, ensuring good alignment between research activities and the needs of farmers, millers and food companies; advancing a community of collaboration; and attracting competitive research funding. I am the Director of Oat Global, supporting every aspect of this endeavor. Oat Global is funded through industry and commodity group partners including General Mills; PepsiCo; Grain Millers, Inc.; Richardson Milling; LaCrosse Milling; and Prairie Oat Growers Association. Strategic direction for Oat Global is provided by a Board of Directors representing industry, academia

(University of Minnesota, South Dakota State University, and University of Wisconsin) and governments (USDA-ARS and Agriculture, and Agri-Food Canada). Oat Global works in close coordination with the North American Millers' Association. Oat Global manages a flexible portfolio of initiatives that have built cohesion, collaboration and publicly-funded research projects on rust diseases of oats; supported an international germplasm exchange; and provided a platform for interaction across the oat research community. An innovation resulting from the ongoing pandemic, our monthly [Speaking of Oats...](#) virtual community forum launched in October 2020. Each session comprises 30 minutes of presentation on a policy, research or processing aspect of oats followed by 30 minutes of community discussion. The series has attracted participants from 19 countries, with 55-110 participants for each live session and as many as 344 views of recorded sessions on YouTube. Jose Costa, USDA ARS National Program Leader, recently contacted me offering, "I'm very glad you are hosting these seminars, it is a great service to the oat community."

Other significant examples of stakeholder engagement include my leadership in developing a public/private core research facility in high throughput plant phenotyping; development of a "Solutions Studio" providing interdisciplinary training for students and boutique analytical solutions for industry partners; and supporting research and scientist training in partnership with NGOs and non-U.S. government agencies in Ethiopia and Kenya.

## **LEADERSHIP IN COMMUNITY OUTREACH AND K-12 EDUCATION.**

*This section addresses:*

- *Preferred:* Experience overseeing and administering educational programs

Public engagement is among the pillars of the land grant opportunity. Extension plays important roles and is well integrated into my department, with some of my faculty having formal Extension appointments. As mentioned above, our Plant Disease Clinic serves as the face of the department for its many external stakeholders. I am an ardent supporter of Extension programming and the Plant Disease Clinic. Additionally, I have worked to enhance public outreach capacity and, increasingly, to align the outreach activities of our students, staff and faculty to support K-12 education. With a particular emphasis on outreach to high school students and teachers, these efforts align with institutional objectives to create pathways to undergraduate enrollment in STEM fields. Following are brief examples of my leadership contributions to K-12 and public education. (This list includes activities for which I am personally responsible and activities enabled by staff reporting to me.)

- Development of first ever outreach support staff positions in the department and the Stakman-Borlaug Center (K-12; public)
- Through a collaborative process, creation of the interdisciplinary [PlantED \(Plant Education\) Group](#) at the University of Minnesota, positioned to launch new outreach activities and raise visibility for plant science-related outreach/engagement (K-12; public)
- Partnership with a local family foundation to develop in-place, research-focused, hands-on experiences for high school students and teachers (K-12)
- Creation and, in partnership with the Bell Museum of Natural History, execution of [SciPride](#), an annual celebration of LGBTQ+ scientists featuring a series of research lightning talks by students and early career professionals (K-12; public)
- Pairing high school science teachers and faculty, providing teachers with training in plant science and supporting high school curriculum development and execution (K-12)

- Diversity in STEM video series in partnership with Minnesota Academy of Science (K-12)
- Organizing/hosting campus events: Science Olympiad, Girls Who Code, field trips for a local agriculture charter high school, recruitment visits for Latinx families (K-12)
- Contributing to/supporting campus events: Queer Science, Minnesota Youth Institute, Future Farmers of America (K-12)
- Developing and hosting a pub science event at a local microbrewery (public)
- Plant science lectures/discussions at: pub talks organized by Bell Museum and Theater of Public Policy, collegiate Classes Without Quizzes, a local middle school (K-12; public)

## **LEADERSHIP IN DIVERSITY, EQUITY & INCLUSION.**

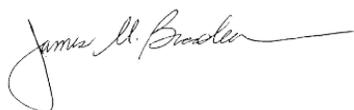
*This section addresses:*

- Required: Demonstrated commitment to diversity and inclusive excellence

I am a first-generation college graduate. From an economically distressed background, my undergraduate education was supported exclusively by Pell Grants, scholarships, full time summer employment and part time employment during the school year. I am a gay man raised in the Midwest and coming of age amid the AIDS crisis. Fueling a deep commitment to accessibility in higher education, land grant institutions have been essential to my professional development, personal growth and career success. Shaped by my own experiences, my commitment to issues of diversity, equity and inclusion are authentic and deeply personal. As a white cis male, I have enjoyed privileges afforded to those attributes. I cannot fully understand what it means to be a woman, a trans person, a person of color, an immigrant or someone with religious heritage outside the mainstream, but I can relate to experiences of exclusion, judgment and discrimination. As a leader, I have consistently leveraged my position of privilege to challenge myself, my colleagues, my institution and my profession to be more inclusive, representative and equitable. I believe it is my responsibility as an administrator to move beyond well intended platitudes to affect improvements in policy, practice and climate. True to my philosophy, issues of diversity, equity and inclusion are integral to my leadership approach and consistently reflected in my actions and decision-making. At the end of my career I want to be remembered as an individual who worked tirelessly to make higher education fairer and more accessible. Representative contributions to diversity, equity and inclusion are detailed in my CV.

In sum, I am a seasoned and agile administrator. With 8 years as a Department Head, experience founding and leading an interdisciplinary center, a commitment to diversity and inclusive excellence, and a history of fundraising, stakeholder engagement and community education, I have the comprehensive leadership skills needed to represent AES and CAS at Spur. As I have learned more about this unique opportunity, I have become increasingly excited about bringing my experience and passion to CSU. I look forward to discussing this position further.

Sincerely,



James M. Bradeen  
 Professor & Department Head, Plant Pathology  
 Co-Director, Stakman-Borlaug Center

## James M. Bradeen



### EDUCATION

Ph.D.	Plant Molecular Genetics, University of Wisconsin	1994
M.S.	Plant Molecular Genetics, University of Wisconsin	1992
B.S. with Honors	Horticulture, Michigan State University	1990
Postdoctoral Fellow	Rutgers University; USDA-ARS/Univ. of Wisconsin	1994 - 2002

### HONORS & AWARDS

University of Minnesota CFANS Little Red Oil Can (2021) – Recognizes contributions that diversify and strengthen the educational and research reputation of our campus  
IBM Accelerated Discovery Forum Distinguished Speaker Series (2017)  
Pennsylvania State Univ College of Agricultural Sciences Multicultural Diversity Fellow (2017)  
University of Minnesota CFANS Distinguished Diversity & Inclusion Award (2016-2017)  
University of Minnesota CFANS Distinguished Teaching Faculty Award (2012)  
University of Minnesota Plant Pathology Distinguished Graduate Mentor Award (2005 & 2011)

### ACADEMIC POSITIONS

**Professor (2013 – present); Associate Professor (2008 – 2013); Assistant Professor (2002 – 2008): University of Minnesota, Department of Plant Pathology.** Research/Teaching appointment focused on genomics of disease and environmental stress resistance in plants; molecular evolution; molecular plant-microbe interactions; science communication. Significant grant-writing and research project management responsibilities. Primary teaching responsibilities at the graduate and advanced undergraduate levels.

### ADMINISTRATIVE LEADERSHIP

**Department Head** **2013 - present**  
**University of Minnesota Department of Plant Pathology**

#### ***Roles & Responsibilities***

Chief academic and administrative officer for a complex academic unit comprising 32 tenure-track, non-tenure track, and adjunct faculty, 25 research and 5-11 administrative support staff, and 25-30 graduate students; affiliations with three USDA research units; faculty permanently stationed at three Minnesota locations and in Australia; and two significant, fee-based research support facilities (Mycotoxin Diagnostic Laboratory and Plant Disease Clinic). Manage a thriving graduate program providing stipend funding for 100% of the graduate study body; and robust and shared undergraduate programs in Plant Science and Food Systems. Oversee strategic financial operations including ~\$2 million in annual

state and federal allocations; >40 endowment funds with a combined principal in excess of \$10 million; annual expenditures of \$3-10 million; and annual external research funding of approximately \$5 million from a wide variety of commodity, state, federal, industry and philanthropic sources. Collaboratively develop departmental vision and direction aligned with college and institutional priorities. Advocate for departmental vision and resources inside the institution and with external stakeholders. Foster environment of strategic thinking and action, entrepreneurship, and well-reasoned risk-taking. Oversee communications, alumni relations, fundraising, and development in partnership with collegiate and institutional professionals. Provide leadership and day-to-day oversight of research priorities and portfolio; research compliance; faculty development, promotion and tenure processes; graduate educational programming, teaching and curriculum; budgets and finance; fundraising and development; facilities; diversity, equity, and inclusion initiatives; etc.

### ***Selected Accomplishments***

- Raised more than \$7,000,000 in external (\$6,502,000) and internal (\$829,000) competitive and philanthropic sources to support the research, teaching, engagement/extension mission of the Department of Plant Pathology 2013-2020. Achieved through development of new research funding streams via enhanced grant-writing capacity, new public-private and public-nonprofit partnerships, and invigoration of development and donor relations strategies. Expansion and improvement of departmental communications focused on research impacts bringing significant institutional, professional and national visibility.
- >50% increase in student credit hours taught (FY12 vs. FY20) through expansion of teaching capacity and pedagogy innovations including on-line teaching; development and teaching of courses that fulfill institutional requirements in History and Technology; development of low-risk, low-input strategies for faculty to “test” new course ideas, in collaboration with other departments, expansion of undergraduate degree program options.
- Enhanced graduate student recruitment processes; improved graduate application review; implementation of strategies for timely submission of competitive fellowship applications; and improved recruitment of students from diverse and underrepresented populations.
- Enhanced graduate student professional development opportunities and expanded funding streams for graduate student stipends including support from Bayer (\$150,000) and philanthropic donors (>\$300,000). Increased opportunities for international internships and research visits (Benin, Ecuador, Ethiopia, Guatemala, Scotland, Sri Lanka, Uruguay); study-abroad (Israel); attendance at scientific meetings; and free membership in professional societies for 100% of our graduate student body.
- Expansion of faculty numbers from 25 to 32 and research footprint in emerging areas including high throughput plant phenotyping/phenomics; genetic improvement of crop plants; and crop adaptation to changing environment.
- Improved faculty mentoring and expanded professional development opportunities.
- Improved research facilities (remodeled laboratories, shared research facilities including an autoclave room, office spaces, meeting rooms, and public engagement spaces; diversified funding streams for our Plant Disease Clinic, a teaching and research facility; expanded and enhanced telecommunications capacity) and new investment in research infrastructure (e.g., university-level core research facility for high throughput plant phenotyping; acquisition of shared research equipment), positioning our institution as a leader in emerging fields.
- Negotiated establishment of a PepsiCo laboratory in our academic building, enabling “in place” student experiential learning opportunities in an industry setting. Yielded >\$700,000 in improvement to shared research facilities and >\$1,800,000 in funding for graduate education, student professional development, and research.



- With approximately \$1.2 million in competitive support from the Bill & Melinda Gates Foundation, USAID, USDA-FAS, and other sources, develop and manage a portfolio of multi-disciplinary international research opportunities for students, staff and faculty that foster global research perspectives; connect University of Minnesota researchers with research projects in other countries with a particular emphasis on Southeast Asia and Africa; and solve real-world food security problems. Integrated experiential learning opportunities.
- Aligned with institutional efforts to create pathways to undergraduate enrollment in STEM fields, designed, launched and led the Plant Education (PlantED) Group, a portfolio of multi-disciplinary, research-based engagement opportunities for students, staff and faculty with particular emphasis on engagement with high school students and science teachers. Secured >\$300,000 in financial support from the H.M. Rechebacher Foundation.

### **ADMINISTRATIVE LEADERSHIP TRAINING**

- University of Minnesota Academic Leader Fundraising Training** **2019 – 2021**  
 Selected by the Dean to engage in a two-year intensive training program in fundraising/development for academic leaders. Administered by University of Minnesota Foundation.
- Big Ten Academic Alliance Academic Leadership Program** **2018 – 2019**  
 Selected by the Provost to engage in a year-long intensive training program to develop academic leadership skills and gain insights into advanced (deanship or above) leadership positions at academic institutions.
- Big Ten Academic Alliance Department Executive Officer Seminar** **2015**  
 Selected by the Provost to engage in a three-day leadership development seminar for department heads and chairs.
- University of Minnesota Department Chairs/Heads Training Program** **2013 – 2014**  
 A year-long training program administered by the Provost of the University of Minnesota for incoming department chairs and heads. Focused on developing leadership skills and awareness of institutional resources and policies.

Frequent and committed participation in a wide array of **short-term workshops and seminars** focused on professional development and leadership skills including response to sexual harassment; cultivating a unit culture of mutual respect and collegiality; best practices for mentoring junior faculty through promotion and tenure; fundraising and development; etc.

### **FUNDRAISING, GRANT-WRITING AND DEVELOPMENT**

**>\$4,000,000 in philanthropic donations from corporations, foundations, alumni and other individual donors from 2013 – 2019.** Responsible for departmental fundraising in partnership with university and collegiate development officers. Align fundraising priorities to further the research, teaching and engagement mission of the department; maintain strong relationships with alumni, donors, and friends through strategic communications and events; cultivate individual donors from first time to major gifts; communicate donor impacts through creative messaging via web-based, social media, in person, and print outputs; develop novel public-private and public-nonprofit relationships and opportunities that align with the land grant mission. >700% increase in philanthropic annual donations from \$170,000 in FY2013 to \$1,200,000 in FY2018.

### **\$2,900,000 in competitive funding from federal agencies and foundations from 2013 – 2019.**

Responsible for securing competitive grants, generally as PI or co-PI, to support the research, teaching, and engagement/extension mission of the University of Minnesota. Historic and contemporary research funding from: Bill & Melinda Gates Foundation; H.M. Rechelbacher Foundation; National Science Foundation (NSF); USAID; U.S. Department of Energy (DOE); U.S. Department of Agriculture-Foreign Agricultural Service (FAS); U.S. Department of Agriculture – National Institute of Food and Agriculture (NIFA); U.S. Environmental Protection Agency (EPA); and numerous regional, state, commodity, and internal (University of Minnesota) sources. In most cases, funding supports new collaborative/interdisciplinary research or experiential learning opportunities for faculty, staff, and students. Significant emphasis on international research. Activities are varied. Specific examples include development and delivery of research training workshops to scientists at the Ethiopian Institute of Agricultural Research; addressing food security challenges through translational research in Bangladesh and Indonesia; and assessing impacts of research investments on agricultural practices and rural economies in Guatemala, Sri Lanka, and Benin.

## **DIVERSITY, EQUITY, & INCLUSION**

### *Philosophy, Motivation, and Guiding Principles:*

I am a first-generation college graduate. From an economically distressed background, my undergraduate education was supported exclusively by Pell Grants, scholarships, full time summer employment and part time employment during the school year. I am a gay man raised in the Midwest and coming of age amid the AIDS crisis. Fueling a deep commitment to accessibility in higher education, land grant institutions have been essential to my professional development, personal growth, and career success. Shaped by my own experiences, my commitment to issues of diversity, equity, and inclusion are authentic and deeply personal. As a leader, I have consistently leveraged my position of privilege to challenge myself, my colleagues, my institution, and my profession to be more inclusive, representative, and equitable. I believe it is my responsibility as an administrator to move beyond well intended platitudes to affect improvements in policy, practice, and climate. True to my philosophy, issues of diversity, equity, and inclusion are integral to my leadership approach and consistently reflected in my actions and decision-making. At the end of my career I want to be remembered as an individual who worked tirelessly to make higher education fairer and more accessible.

### *Recent Representative Activities:*

- University of Minnesota Aspire iChange Network Team Member (2020 - present); invited by the Provost to serve as one of 12 university representatives to the nationwide Aspire Alliance aimed at institutional assessment and improvement in the Diversity, Equity, and Inclusion space with the specific goals of achieving widespread recruitment, hiring, and retention of STEM faculty from underrepresented groups and engaging all STEM faculty in inclusive teaching, advising, and research mentoring.
- Keeping Our Faculty Symposium Organizing Committee Member. (2021 - present); invited by the Provost to serve on a planning committee for a 2022 national conference focused on recruitment, hiring, and retention of Black and Indigenous faculty.
- In partnership with Minnesota Academy of Science, creation of a departmental video series on diversity in the plant sciences. (2021)

- Cornell University Panel Discussion on LGBTQ+ scientists, federal grant opportunities, and broader impact statements. (July, 2021; *invited*).
- University of Tennessee Department of Entomology & Plant Pathology Diversity and Inclusion Lunch Series (June 4, 2021; *invited* presentation on LGBTQ+ scientists).
- Founder and Co-Organizer, *SciPride*. (2019 - 2021) This weeklong event hosted by the University of Minnesota Bell Museum of Natural History annually highlights research contributions of LGBTQ+ students, staff, faculty, and alumni. The 2021 event will include representation of all University of Minnesota STEM-related colleges.
- Worked collaboratively within our departmental shared governance structure to develop and evaluate new approaches to improve representation of BIPOC students in our undergraduate and graduate degree programs and to support efforts to grow a diverse student pipeline for fields of study in the agricultural sciences (September 2020 – present).
- Invited contributor to efforts to highlight diversity in STEM professions in undergraduate courses at the University of Ottawa and Carlton University (August 2020).
- Invited Co-Organizer and Co-Moderator for the panel presentation *Gender Bias: The Contributions, Advancements, and Challenges of Women in Agricultural Sciences*, at the Plant Health 2020 International Conference (August 11, 2020; virtual).
- As a member of the governing Council for our professional society, one of two co-authors and 8 co-signers of the American Phytopathological Society Statement condemning the murders of George Floyd, Breonna Taylor, and Ahmaud Arbery and outlining tangible targets, goals, and procedures for our society to support BIPOC professionals (June 2020).
- Member, Organizing Committee for the American Phytopathological Society Lafayette Frederick Diversity in Mentoring Award (June 2020 – present).
- Chair/Member, Committee for Diversity, Equity, and Inclusion, American Phytopathological Society (Member: 2010 – present; Chair: 2015):
  - Initiated and led efforts resulting in the APS Council adopting a comprehensive policy on diversity and inclusion (2015 – 2016).
  - Initiated and led successful nationwide, grassroots effort to petition the APS Council to enforce the adopted diversity and inclusion policy by condemning the state of Texas in its efforts to ban public accommodations for trans people (in connection with the annual society meeting held in Texas in 2017). These efforts additionally led to a commitment to avoid scheduling conferences in states with laws limiting equal access to public services.
  - Organized the first LGBTQ+ Networking Social as part of the 2015 APS annual meeting. This workshop has become a recurring and highly popular annual event and has attracted significant corporate sponsorship in recent years.
- Panel Member, *Leveraging Diversity: The Chairs' Transformative Role Workshop*; invited by Higher Education Recruitment Consortium (St. Catherine University, 2017).

## **GRADUATE STUDENT TEACHING & ADVISING**

### Graduate Student Advising/Co-Advising:

- Molly Veregge – M.S., Plant Pathology, Joins Fall 2021
- Nick Talmo – M.S., Plant Pathology, Joins Fall 2021
- Lillian McGilp – M.S., Plant Pathology, 2018 (Current: research scientist, University of MN)

- Emily Ellingson – M.S., Applied Plant Science, 2017 (Current: curator of native plants, State Botanical Garden of Kentucky)
- Josh Havill – M.S., Plant Pathology, 2017 (Current: Ph.D. student, University of MN)
- Nicholas Howard – Ph.D., Applied Plant Science, 2017 (Current: Postdoc, Carl von Ossietzky Universität, Germany)
- Alex Susko – M.S., Applied Plant Science, 2016 (Current: Ph.D. student, University of MN)
- Matthew Clark – Ph.D., Applied Plant Science, 2014 (Current: assistant professor, University of Minnesota)
- Liangliang Gao – Ph.D., Plant Pathology, 2013 (Current: Postdoc, Kansas State Univ)
- Cari Schmitz – M.S., Applied Plant Science, 2013 (Current: Ph.D. student, Univ of WI)
- Steven McKay – Ph.D., Applied Plant Science, 2010 (Current: research scientist, Corteva Agriscience)
- Massimo Iorizzo – Ph.D., Plant Breeding (University of Naples, Italy), 2009 (Current: associate professor, North Carolina State University)
- Adriana Telias Rabinovich – Ph.D., Applied Plant Science, 2009 (Current: lecturer, San Jose State University)
- Ben Millett – Ph.D., Plant Pathology, 2008 (Current: research scientist, Corteva Agriscience)
- Ryan Syverson – M.S., Plant Pathology, 2007 (Current: research scientist, Bayer)
- Edmund Quirin – M.S., Plant Pathology, 2006 (Current: research scientist, Corteva)
- Maria Julia Sanchez – M.S., Plant Pathology, 2005 (Current: research scientist, Bayer)

Postdoctoral Scientist Advising:

- Brett Arenz (Current: associate professor, University of Minnesota)
- Harpartap Mann (Current: marketing manager, Bayer Crop Science)
- Noah Rosenzweig (Current: assistant professor, Michigan State University)
- Leon van Eck (Current: assistant professor, Augsburg University)

Classroom and Experiential Teaching:

- PLPA5103/8103 “Molecular Plant-Microbe Interactions” (3cr) (2009 – 2015; 2020 – 2021)
- PLPA5302/8302 “Genomics of Plant-Associated Microbes” (3cr) (2004 – 2007)
- PLPA5300 “Current Topics in Molecular Plant Pathology” (1cr) (2004 – 2021)
- PLPA8200 “Plant Pathology Seminar” (1cr) (2003 – 2021)
- PLPA8123 “Research Ethics” (0.5cr) (2017)
- Numerous guest lecture contributions to undergraduate and graduate courses
- Faculty advisor for numerous undergraduate thesis projects
- Visiting instructor, University of Naples (Italy) (2006; 2010)

## RESEARCH CONSULTING

External research consultant for PepsiCo on molecular biology/genomics of potato: identified knowledge gaps; outlined research trends; identified potential areas for research investment relative to the needs of a large, globally-engaged food product company. (2015 – 2016)

## REPRESENTATIVE RESEARCH PUBLICATIONS

(Complete list available upon request)

### Summary:

Peer-reviewed publications: 68

Books: 1

Book Chapters: 8

### Recent Publications (2018 – 2021):

- Esposito, S., R. Aversano, **J. Bradeen**, V. D'Amelia, C. Villano, D. Carputo. 2021. Co-expression gene network (WGCNA) analysis of cold-tolerant *Solanum commersonii* reveals new insights in response to low temperatures. *Crop Science*. *In Press*.
- Arias, D.C.L., A. Chastellier, T. Thouroude, **J. Bradeen**, L. van Eck, Y. De Oliveira, S. Paillard, F. Foucher, L. Hibrand-Saint Oyant, and V. Soufflet-Fresion. 2020. Characterization of black spot resistance in diploid roses with QTL detection, meta-analysis and candidate-gene identification. *Theoretical and Applied Genetics*. 133:3299-3321.
- Zurn, J.D., D.C. Zlesak, M. Holen, **J.M. Bradeen**, S.C. Hokanson, and N.V. Bassil. 2020. Mapping the black spot resistance locus *Rdr3* in the shrub rose 'George Vancouver' allows for the development of improved diagnostic markers for DNA-informed breeding. *Theoretical and Applied Genetics*. 133:2911-2020.
- Esposito, S., R. Aversano, **J.M. Bradeen**, A. Di Matteo, C. Villano, and D. Carputo. 2020. Deep-sequencing of *Solanum commersonii* smallRNA libraries reveals riboregulators involved in cold stress response. *Plant Biology*. 22:133-142.
- Kantar, M., B. Runck, B. Raghaven, A. Joglekar, S. Senay, B. Krohn, J. Neyhart, **J.M. Bradeen**, M. Soto Gomez, and R. Kjelgren. 2019. The many-faced Janus of plant breeding. *Plants, People, Planet*. 2019:1-4.
- van Eck, L. and **J.M. Bradeen**. 2019. Hunting for novel disease resistance genes: observations and opportunities from the Rosaceae. *Acta Horticulturae*. 1232:125-134.
- Ellingson, E., S.C. Hokanson, and **J.M. Bradeen**. 2018. Eastern hemlock (*Tsuga canadensis* (L.) Carriere): perspectives from its northwestern range limit. *Horticultural Reviews*. 46:227.
- Ellingson, E., S. McNamara, **J.M. Bradeen**, and S.C. Hokanson. 2018. The genetic diversity of disjunct populations of Eastern hemlock (*Tsuga canadensis*) in Minnesota. *Acta Horticulturae*. 1191:225-234.
- Susko, A.Q., T.A. Rinehart, **J.M. Bradeen**, and S.C. Hokanson. 2018. An evaluation of two seedling phenotyping protocols to assess pH adaptability in deciduous azalea (*Rhododendron sect. pentathera* G. don). *HortScience*. 53:268-274.
- van Eck, L. and **J.M. Bradeen**. 2018. The NB-LRR Disease Resistance Genes of *Fragaria* and *Rubus*. In: Hytonen, T., J. Graham, and R. Harrison (eds.) *The Genomes of Rosaceous Berries and Their Wild Relatives*. Springer, Cham, Switzerland, pp. 63-75.
- Zurn, J., D. Zlesak, M. Holen, **J.M. Bradeen**, S. Hokanson, and N. Bassil. 2018. Mapping a novel black spot resistance locus in the climbing rose Brite Eyes™ ('RADbrite'). *Frontiers in Plant Science*. 9:1730.

### Additional Significant Publications:

- Aversano, R., F. Contaldi, M.R. Ercolano, V. Grosso, M. Iorizzo, F. Tatino, L. Xumerle, A. Dal Molin, C. Avanzato, A. Ferrarini, M. Delledonne, W. Sanseverino, R.A. Cigliano, S.

- Capella-Gutierrez, T. Gabaldon, L. Frusciante, **J.M. Bradeen**, and D. Carputo. 2015. The *Solanum commersonii* genome sequence provides insights into adaptation to stress conditions and genome evolution of wild potato relatives. *Plant Cell*\* 27:954-968. (\*this article featured on journal cover).
- Gao, L., Z.J. Tu, B.P. Millett, and **J.M. Bradeen**. 2013. Insights into organ-specific pathogen defense responses in plants: RNA-seq analysis of potato tuber-*Phytophthora infestans* interactions. *BMC Genomics*. 14:340.
- Quirin, E.A., H. Mann, R.S. Meyers, A. Traini, M.L. Chiusano, A. Litt, and **J.M. Bradeen**. 2012. Evolutionary meta-analysis of Solanaceous R gene and *Solanum* RGA sequences and a practical framework for cross-species comparisons. *Molecular Plant-Microbe Interactions*. 25:603-612.
- Telias, A., K. Lin-Wang, D.E. Stevenson, J.M. Cooney, R.P. Hellens, A.C. Allan, E.E. Hoover, and **J.M. Bradeen**. 2011. Apple skin patterning is associated with differential expression of *MYB10*. *BMC Plant Biology*. 11:93.
- Bradeen, J.M.**, M. Iorizzo, D.S. Mollov, J. Raasch, L. Colton Kramer, B.P. Millett, S. Austin-Phillips, J. Jiang, and D. Carputo. 2009. Higher copy numbers of the potato *RB* transgene correspond to enhanced transcript and late blight resistance levels. *Molecular Plant-Microbe Interactions*\*. 22: 437-446.
- Song, J.\*, **J.M. Bradeen**\*, S.K. Naess, J.A. Raasch, S.M. Wielgus, G.T. Haberlach, J. Liu, H. Kuang, S. Austin-Phillips, C.R. Buell, J.P. Helgeson, and J. Jiang. 2003. Gene *RB* cloned from *Solanum bulbocastanum* confers broad spectrum resistance to potato late blight. *Proceedings of the National Academy of Sciences*. 100:9128-9133. \* co-first authors.

## REPRESENTATIVE INVITED & CONTRIBUTED PRESENTATIONS

### Summary:

Invited: ~30

Contributed: >180

### Selected Recent Presentations (2015 – 2021):

- University of Tennessee Department of Entomology & Plant Pathology Diversity and Inclusion Lunch Series (June 4, 2021; *invited* presentation on LGBTQ+ scientists)
- *Gender Bias: The Contributions, Advancements, and Challenges of Women in Agricultural Sciences*, Plant Health 2020 International Conference (August 11, 2020; *invited* session co-organizer and co-moderator)
- International Federation of Agricultural Journalists Congress, Minneapolis, MN (July 28, 2019; *invited*)
- Oregon State University, Corvallis, OR (June 6, 2019; *invited*)
- Café Scientifique, Minneapolis, MN (November 20, 2018; *invited* public engagement seminar)
- International Potato Center, Lima, Peru (November 13, 2018; *invited*)
- University of Minnesota, St. Paul, MN (October 29, 2018; *invited*)
- Iowa State University, Ames, IA (October 23, 2018; *invited*)
- International Congress of Plant Pathology, Boston, MA (August, 2018)
- University of Nebraska, Lincoln, NE (April 9, 2018; *invited*)
- Cornell University, Geneva and Ithaca, NY (September 19-20, 2017; *invited*)

- Pennsylvania State University, State College, PA (September 25, 2017; *invited*)
- IBM Research Innovation Lab, San Jose, CA (September 7, 2017; *invited*)
- VII International Symposium on Rose Research and Cultivation, Angers, France (July, 2017)
- Fulbright Enhancement Seminar, Minneapolis, MN (April 19, 2017; *invited*)
- Classes Without Quizzes, Minneapolis, MN (April 1, 2017; *invited* public engagement seminar)
- III Symposium on Woody Ornamentals of the Temperate Zone, Minneapolis, MN (August, 2016)
- 18<sup>th</sup> Triennial European Association for Potato Research, Vico Equense, Italy (November, 2015; *invited keynote*)
- American Phytopathological Society Annual Meeting, Pasadena, CA (August, 2015)
- American Society for Horticultural Sci Annual Meeting, New Orleans, LA (August, 2015)
- Plant and Animal Genome Conference, San Diego, CA (January, 2015; *invited*)

### **SERVICE (RECENT REPRESENTATIVE EXAMPLES)**

#### *Service to Institution, College, Department:*

- Member, University of Minnesota Graduate School Advisor Board (2021 – present); appointed by the Dean of the Graduate School
- Member, Keeping Our Faculty Symposium Organizing Committee. (2021 - present); invited by the Provost to serve on a planning committee for a 2022 national conference
- Member, University of MN Regents Professorship Committee (2021 – present); among 9 faculty system-wide appointed by the President to award our highest professorship
- Member, University of MN Aspire iChange Network Team (2020 - present); among 12 individuals invited by the Provost to serve on the nationwide Aspire Alliance aimed at institutional assessment and improvement in the Diversity, Equity, and Inclusion space
- Chair, Philip C. Hamm Memorial Scholarship & Lectureship in the Plant Sciences Selection Committee (2019 – 2021); invited to chair this multi-college committee
- Member, Bayer Graduate Fellowship Selection Committee (2016, 2021)
- Member, Grand Challenges Research Committee, University of Minnesota (2015 – 2020); invited by the Provost to serve on this university-wide committee
- Member, Research Computing Internal Review Committee, University of Minnesota (2018 – 2019); invited by Vice President for Research to serve on this university-wide committee
- Chair, Plant Growth Facility Biosafety Level 2/3 Management Committee, University of Minnesota (2013 – present); university-wide committee governing management and safety of core research facility
- Member, Biosafety Level 3 Advisory Committee, University of Minnesota (2013 – present)
- Panel Member, “Academic Leadership Development in the Department, Division, and Cooperative” (March 26, 2019); invited by UMN Office of Human Resources
- Member, Crop Variety Review Committee (2013 – present); university-wide committee governing commercialization of crop varieties; protection of institution intellectual property
- Mentor, Personal Graduate Student Advising Statement Workshop (CFANS) (2019); invited by Dean to serve on this college-wide professional development committee
- Senior Member, Research Advisory Council (CFANS) (2015 – 2019); invited by the Associate Dean for Research & Graduate Education

- Mentor to University of Minnesota Head of Entomology (2017 – present); invited
- Chair, Search Committee for Head of Entomology (2017); invited
- Member, Research Serendipity Team, University of Minnesota (2015 – 2016); invited by the Vice President for Research to serve on this university-wide committee

*Service to Professional, National, International Communities:*

- Internal Communications Officer and governing Council Member, American Phytopathological Society (2018 – present)
- Advisory Board Member, MN Invasive Terrestrial Plants & Pests Center (2018 – present)
- Director, Oat Global (2015 – present)
- External Review Committee Member: The Ohio State University Comprehensive Departmental Review – Plant Pathology (2020)
- External Reviewer: Pennsylvania State Univ Graduate Program – Plant Pathology (2018)
- Chair/Member, Academic Unit Leaders Forum, American Phytopathological Society (Member: 2013 – present; Chair: 2014 – 2015)
- Chair/Member, Committee for Diversity, Equity, and Inclusion, American Phytopathological Society (Member: 2010 – present; Chair: 2015)
- Panel Member, Leveraging Diversity: The Chairs' Transformative Role Workshop; invited by Higher Education Recruitment Consortium (St. Catherine University, 2017)