



New Research Projects Funded for 2021-2022



For 60 years, the **American Floral Endowment (AFE)** has been the 'go-to' source for funding research and communicating the results, along with the researchers, to the floral industry. AFE's research has provided generations of advances and will continue to do so – sharing knowledge that helps the industry grow stronger. As AFE celebrates our 60th Anniversary, we also are pleased to share the new research funding for this year.

In 2021-2022, AFE will support **7 new research projects and 6 continuing projects totaling over \$660,000 in funding** from both the Endowment and the Thrips & Botrytis Research Fund. "This research addresses industry-wide challenges and supports the continued advancement of floriculture. The findings from these projects will create new best practices, solve critical issues, and increase both productivity and profitability for floral businesses," said Terril Nell, Ph.D., AFE Research Coordinator.

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Paul Ecke, Jr. & Altman Family Scholarship Recipients - Flourishing Industry Prodigies

Meet the future of the floral industry; this year's Paul Ecke, Jr. and Altman Family Scholarship Recipients.

They started out like many of us -- unassuming, young, soon-to-be plant people searching for a purposeful path in life.

Somewhere along the way, each sprouted a love for the world of flowers and plants. And now, they're trenching a better future for all of us through their impressive experience in new research projects, academia, and spreading plant knowledge.

Albeit young, their resumes are packed with experience in the field. These flower fanatics aren't shy about their love for immersing themselves in industry issues and searching for real, practical solutions.

With technology, sustainability, and possibilities on the brain, all three students are aiming high for the floral future with hopes to give back to the industry through their career endeavors. They cite Altman & Ecke Scholarships affording them the time and funds to pursue precise projects, ease the financial burden of their education, and expand their work.

With unwavering dedication, these scholars have big plans for their studies and research.

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About AFE

AFE's Mission Statement

The American Floral Endowment (AFE) is an independent nonprofit organization that funds research, scholarships, internships, and grants in floriculture and environmental horticulture for the benefit of growers, wholesalers, retailers, allied industry organizations and the general public.



Funding Generations of Progress
Through Research and Scholarships



The AFE Bulletin is proudly sponsored by the Todd Bachman Memorial Fund.

Todd Bachman served as Chairman and CEO of Bachman's before his untimely death in 2008. Todd was a past chairman of the American Floral Endowment and was very active in many state and national industry organizations. Those who knew him will always remember what a great communicator he was and his outstanding leadership and devotion to work and family. His wife and daughters are honored to carry on his legacy.

New Research Projects Funded for 2021-2022

Newly Funded Projects:

- **Advancing Nighttime Lighting to Control Flowering of Photoperiodic Floriculture Crops:** Qingwu Meng, University of Delaware
- **Can Western Flower Thrips be Managed in Commercial Greenhouses with UV Light:** Bruce Parker, University of Vermont
- **Engineering Floral Fragrance to New Heights using a Synthetic Biology Approach:** Thomas Colquhoun, University of Florida
- **Fluorescence Imaging:** A low-cost method for early stress detection: Marc Van Iersel, University of Georgia
- **Optimizing the Efficacy of Beneficial Bacteria Against Botrytis Blight in Greenhouse Crops:** Michelle Jones, The Ohio State University
- **Tulipalins:** A Natural Fungicide for Cut Flowers from a Tulip Bulb Waste Stream: Thomas Gianfagna, Rutgers – The State University of New Jersey
- **Using Sub-zero Temperatures for Long-Term Storage of Cut Flowers:** John Dole, North Carolina State University

To see a full list of our currently funded projects, visit endowment.org and click **Currently Funded Research** in the Research drop down. This list will be updated on July 1, 2021, at the beginning of our fiscal year to include the new projects.



Want to Get Involved?

The Endowment welcomes industry suggestions about critical needs and solutions to nagging problems. AFE can help YOU! Have suggestions or need information

on specific problems? Contact AFE's Research Coordinator, Dr. Terril A. Nell (tnell@afeendowment.org). And, please remember that AFE has an active internship program and scholarship program to develop the next generation of floriculture professionals. If you are interested in hosting an intern, please contact Program Coordinator, Candice Musgrove (cmusgrove@afeendowment.org).

Please consider making a contribution to support AFE's research and other industry programs. It is through the engagement and participation of industry members that we are able to continue to support new research and increase the overall sustainability of our industry.

NEW!

Grow Pro Webinar Series

PROVIDING GROWERS WITH THE LATEST INNOVATIVE SOLUTIONS

The Endowment is hosting a NEW Webinar Series launching soon. The series features AFE-funded research results for growers and includes a Q&A opportunity for YOU to "Ask a Researcher." Visit endowment.org/GrowPro/ to register.

May 18th – The Current Status of Growing Media

June 22nd & 29th – Optimizing LED Lighting for Flower Crops

July 27th – Making Sense of Artificial Intelligence in Floriculture

August 24th – Impatiens Selections for Better Management of Downy Mildews

Joshua Craver Joins Vic & Margaret Ball Committee

Joshua Craver, Ph.D. has been appointed as the newest member of AFE's Vic & Margaret Ball Committee for the **Vic & Margaret Ball Intern Scholarship Program**. He is an assistant professor of Controlled Environment Horticulture at Colorado State University.

Craver received his M.S. in Horticulture from Kansas State University in 2014 and Ph.D. in Horticulture from Purdue University in 2018. He teaches multiple courses at CSU including Greenhouse Management, Indoor Crop Production and Physiology, and Greenhouse Practicum. He also advises multiple graduate and undergraduate students engaged in research focused on enhancing the production of vegetable and floriculture crops in controlled environments.

Craver is not new to the American Floral Endowment. In 2011, Craver was a recipient of the Vic & Margaret Ball Intern Scholarship as an undergraduate student at Mississippi State University where he worked for the summer at Metrolina Greenhouses.

Noting the impact of his scholarship and internship experience, Craver shares his reason for joining the committee, "As a previous recipient of the Vic & Margaret Ball Intern Scholarship, I understand firsthand the experience, support, and opportunities this program provides. I'm incredibly excited to help facilitate this internship to support both our students and the future of our industry."

In honor of the Endowment's 60th Anniversary this year, Craver also shared his #AFEandMe story which has carried past his initial Vic and Margaret Ball Scholarship. "As I continued my education in graduate school, AFE facilitated support through the Paul Ecke, Jr. Scholarship. Looking back, it's incredible to see how integral AFE has been in my

education and helping me achieve my career goals. The resources and programs AFE provides have an invaluable impact on the future of our industry. I'm excited to not only continue my involvement with AFE in the years ahead, but also share these incredible opportunities with the next generation of students I now have the privilege to teach!"

As a member of the Ball Committee, Craver will be working with several AFE Trustees and other faculty members to review student applications for the Vic & Margaret Ball Intern Scholarship Program and provide counsel to help promote the program to students. He will be assisting

the future generations of recipients understanding first-hand the lasting effects of this industry opportunity.

The Vic & Margaret Ball Intern Scholarship Program gives students the opportunity to gain practical, hands-on floriculture/horticulture experience through a three, four, or six-month paid internship at a commercial production greenhouse or nursery.

In 1992, Vic and Margaret Ball made a generous donation to AFE to establish this program for students to apply classroom knowledge to real-world experiences and help ensure successful future generations of horticulture professionals. In 2020, scholarship money awarded to students who take part in the Vic &

Margaret Ball Intern Scholarship Program reached the milestone of \$1 million and continues to grow each year.

To read more about the Vic & Margaret Ball Intern Scholarship Program visit endowment.org/internships/ and to submit your #AFEandMe story visit endowment.org/60th/.

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2021 Paul Ecke, Jr. Scholar, Caleb Spall

About the Paul Ecke, Jr. Scholarship

In honor of the late Paul Ecke, Jr., the Paul Ecke, Jr. Scholarship awards \$5,000 a year for two years (\$10,000 total) to a dedicated MS/PhD student attending a US land-grant university. Paul Ecke, Jr. was a highly respected, long-time member of the industry who contributed vital knowledge through innovative research and education programs. This scholarship is awarded to passionate graduate students interested in contributing to the industry in a like spirit through research and education.



Caleb Spall, Michigan State University

At the “intersection of industry, science, and art,” you can find Michigan State graduate student, Caleb Spall.

This Ann Arbor native sprouted a love for floriculture and horticulture through an middle school science project. However, it wasn’t until his sophomore year as an undergrad at MSU that the interest shifted into a career goal during a course on greenhouse structures and management with his advisor, Dr. Roberto Lopez.

“It was amazing – I was fascinated by the combination of automation, technology, plants, and art. It inspired me to specialize in floriculture.”

Caleb’s favorite thing about being in the industry? The unifying enthusiasm for growth that he observes from industry members, companies, and organizations.

Caleb noted, “It’s a really unique industry – in my experience with research and interning, it seems like lots of people knows each other and want to collaborate on work. We can all learn from one another, cross-pollinate ideas, and help each other out. That’s really something special to me.”

He hopes that this collaboration continues to be a common theme of the industry in the pursuit of more sustainable techniques in lighting systems, biological control, and reducing chemical reliance.



2021 Altman Family Scholars: Mason Marshall and Mary Lewis

About the Altman Family Scholarship

Passionate industry advocacy is a staple for the Altman Family Scholarship. Created in 2015 by Ken and Deena Altman, this Scholarship seeks to support improvement in horticulture education and research by investing in outstanding, young industry professionals.

The Altman’s believe in the power of giving back and do so through the reach of this scholarship and Altman Plants programs that offer growing expertise to the industry. This scholarship provides an annual scholarship (this year \$5,400) to promising and dedicated graduate students pursuing a career in horticulture.



Mason Marshall, Texas A&M University

Before his world grew in green, Mason Marshall intended to pursue a medical career. However, the seed of horticulture was planted by a summer job he got at a local business in Odessa, TX called Yard Dog Garden Center.

Mason notes, “It opened my eyes to the world of horticulture. I really owe a lot to owners Randy and Lynn Correa. They put me on the path that I’m on today. Working in the nursery, seeing all the new genetics, petunias, and all the new things on the market got me interested in horticulture and that’s really when I fell in love with it.”

Two years into this job, Mason transferred to Texas A&M where he later graduated with a bachelor’s degree in horticulture and minors in entomology and plant breeding. Today, he’s pursuing his master’s at Texas A&M in Horticulture Science. Through graduate school, he branched into floriculture through research in the efficacy of plant growth regulators on potted plant sunflowers and potted plant production in a greenhouse. These projects have allowed Marshall to help introduce new hybrid sunflowers to the market with unique branching habits and continuous flowering capabilities.

In addition to his research and slew of departmental scholarships, Mason has taken on four semesters as a Graduate Teaching Assistant. Having come from a family of educators, teaching is in his blood.

Mason’s favorite things about his involvement in the industry are passing his knowledge on and being surrounded by plants. Sharing that connection and new information with industry members contributes to industry growth, which he notes as very promising.



Mary Lewis, University of Georgia

Meet Mary Lewis, or as some may know her, Mary Snowberry. This young, enthusiastic, self-proclaimed plant lady has been surrounded by family members in the earth science field her entire life. It was only a matter of time until Mary found a niche of her own.

During a family hiking trip in the white mountains of New Hampshire when she was 11, Mary and her family were listening to a naturalist give a talk on local unique plant species, one of which was the snowberry. The snowberry is a rare, small plant with an edible, white berry that tastes like a tic-tac. On this trip, Mary was the snowberry spot-woman. “That became the moment in time for me where I told myself I love plants. I thought, ‘this is a very unique thing that I want to be a part of’ because I really enjoyed the whole process.”

As Mary puts it, she went down the plant rabbit hole. She later got her bachelor’s degree in horticulture at the University of Georgia. She credits the late Dr. Paul Thomas and other dedicated, caring professors for providing the knowledge and push she and others needed to pursue opportunities within the field like research, scholarships, and internships. Since then, she has not only

been pursuing her PhD in ornamental plant breeding but has been awarded AFE scholarships on multiple occasions, accumulated recognition in numerous research competitions, and even interned at Disney.

When asked about her motivation in the field, Mary adds, “What pushes and invigorates me is knowing how much there is to learn, and how much variety there can be. I love the green industry because we not only produce plants from a commercial standpoint, for production and for profit, but we also get to teach people about the best ways to do it – and to watch the fruits of our labor when we succeed.”

Like the scholarships that these recipients received, they embody what it means to be a part of floriculture and horticulture – truly motivated plant people inspired by the life they can breathe into the future of the industry.

To read the full article visit endowment.org/ecke-altman-2021.

Annual Report

July 1, 2019 - June 30, 2020

We are pleased to present our 2019-2020 Annual Report. As the leading national charitable organization for the floral industry, contributions to AFE support scientific research, education, scholarships, internships, and career development programs.

Thanks to our dedicated supporters, the American Floral Endowment continues to provide important and vital programs and services to the floral industry.

It was a tough year – for everyone. Through the onset of COVID-19, there were incredible challenges and losses. But through those challenges, the industry came together to demonstrate the Power of Flowers.

The Endowment also faced new obstacles as we navigated through these unprecedented times, but the AFE Trustees remained committed to providing every resource possible and ensuring necessary funding to help the industry adapt.

Thanks to a PPP loan, reduction of expenses, and the dedication of the AFE's supporters, our program funding continued at 100%. With university research suspended, we collaborated with researchers to make sure they could continue their projects when possible. Additionally, we shifted our educational grant funding from in-person event support to virtual education support. These adjustments ensured that all of our initiatives were able to continue to aid the industry during the "new normal" of 2020.

Even though we had to modify our operations and halt in-person events, our commitment to the industry remains strong. With your continued support, we can continue to provide the necessary funding to support solutions, education, and young professional development.

We hope that you'll partner with us to support future growth by making a tax-deductible contribution today. Every dollar helps support these important programs and ensures that the floral industry will continue to thrive.

To access the full report, visit endowment.org/annual-reports.

Key Highlights

\$398,470

in funding for 12 research projects



\$50,200

Awarded to Support 16 Educational Programs at the Local, Regional, and National Levels



Since 1961, AFE has funded more than

\$18 MILLION

in research, scholarships, internships, and grants to grow the floral industry.



\$100,000

Awarded through 30+ Annual Scholarships

2021 MARKS AFE'S

60TH Anniversary

Throughout the year, we will be celebrating the past, present, and future of the Endowment, highlighting the many successes over the decades and those that helped us get there.

For 60 years, and only through industry support, AFE has provided vital research, programs, and resources to advance the floral industry.

JOIN US IN SUPPORTING:

- RESEARCH
- SCHOLARSHIPS AND INTERNSHIPS
- EDUCATIONAL GRANTS
- AFE CAREER CENTER

Donate \$60 in support of our 60th Anniversary and receive a commemorative t-shirt! Partner with AFE to help us continue this important work!

CELEBRATE WITH US!

Visit endowment.org/60th

**Your charitable donation is fully tax-deductible*



AFE THROUGH THE DECADES



60TH AMERICAN FLORAL ENDOWMENT
60 Years Of Providing For The Future

JOIN US IN CELEBRATING WITH \$60 FOR 60 YEARS!



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Connecting Floral Industry, Talent, and Opportunity

EMPLOYERS: *Attract top talent. Hire for success.*

Having a hard time finding talent? We're here to help. Unlike other job boards that cater to the masses, we provide a direct line to qualified candidates who are interested in our beautiful and fast-paced industry.

WHAT ARE YOU WAITING FOR? GET STARTED!



Launch your search today!
AFFcareercenter.com



Job Seekers: *Find the right job. Make your career bloom.*

We know the job search can be overwhelming and daunting. We can help you find the right position in horticulture or floriculture. The best part: Flowers and plants are scientifically proven to improve our emotional health and well-being – which means you'll be working in an industry that makes a difference in peoples' lives.

GET STARTED ON YOUR NEXT CAREER MOVE!



Funding Generations of
Progress Through Research
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