

## 2023 ANNUAL REPORT



## Message from the 2024 ESA President



Fellow ESA members,

What defines the Entomological Society of America? If you ask me, it's you—our members. While others might say our science defines us, people are the heart of any organization. How we gather and the knowledge we share has changed over the years, yet our constant strength is we are an organization of people passionate about solving the world's problems through insect science.

At the outset of my term as ESA president, I highlighted the need to reinvest in ourselves and in our organization, to position our people—again, you, ESA members—to thrive.

This reinvestment includes ensuring that our governance, or how we make decisions as a Society, can keep pace with the speed of today's culture. Big questions of how to serve a diversifying membership and how to find and evaluate new opportunities—along with smaller questions of how to best meet, discuss, and share ideas—are at the core of strategic improvements the ESA Governing Board is pursuing. In 2024, we have engaged a consultant to work with the board and a member task force to explore whether our current governance system meets our needs and how it might be improved or reimagined.

Investing in our organization also includes advancing technology. As in many businesses, tech investments often lag behind investments in other areas because it is easy to think we can "make do" for one more year. Yet the weight of using a system not working optimally has a cost, too. To that end, in 2023 the Board approved an investment in a new learning management system, which will grow ESA's capabilities to provide certification study courses, professional development, leadership training, and more for many years to come. While this is by no means our last investment into our technology, I'm excited to see the ESA staff team become experts in this new platform.

We're also reinvesting in our organization's capacity to address the biggest issues we face as insect scientists. I trust you have seen studies and media reports on the global decline of insects. Under the leadership of past ESA presidents Jessica Ware and Marianne Alleyne, a task force created in 2022 aims to wrap up its work in 2024, having worked collaboratively on six principles that will inform how we as individuals can make a difference as well as how ESA can have a concrete impact on reversing these trends.

We are fortunate to have a thriving organization. ESA exists because of its members, and there are so many ways for members to lead and try new things. While some efforts may require Board support or staff coordination, there are also so many ways to lead outside of our structured leadership. My fellow elected leaders and I are here to assist you in getting the resources you need and to grow your tinder spark into a flame of love for your work.

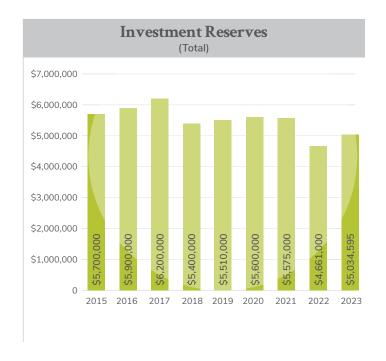
I look forward to seeing you this year, as always.

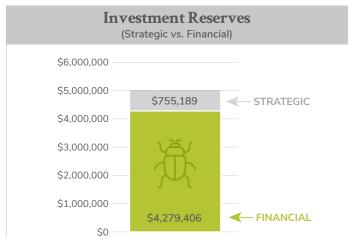
Sincerely,

Jennifer A. Henke, BCE ESA President February 2024

## **Investment Reserves**

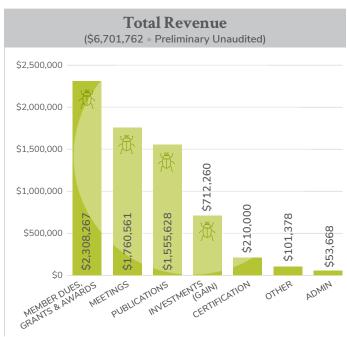
ESA maintains funds designated for two purposes: "financial" reserves to protect the Society from sudden financial shocks and "strategic" reserves to fund new programs and opportunities that are not part of routine operations. In 2023, ESA's investment reserves rebounded after losses in 2022. While the total figures remain below recent highs, ESA is still able to pursue strategic ventures that leadership deems beneficial to the Society.

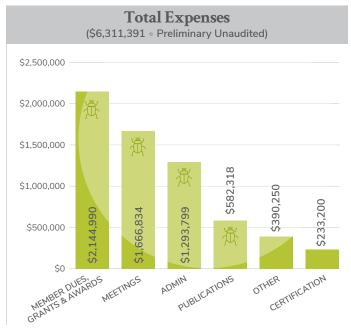




## Financial Updates

ESA saw a significant increase in revenue in 2023. Driven in large part by growth in our grants program, the Annual Meeting, and our investments, 2023 revenue exceeded budget by more than \$450,000. ESA's management and the Finance Committee continue to monitor expenses while also following the revised investment guidelines put in place in 2022.







## Meetings

#### **ENTOMOLOGY 2023**

**Insects and Influence:** Advancing Entomology's Impact on People and Policy

Entomology 2023 in National Harbor, Maryland, was our first return to the Washington, DC, area since the 1992 meeting in Baltimore. On Monday, November 6, we hosted **94 student competition sessions** requiring **450 volunteers**. Thank you to everyone who helps make the student competition a success each year; it takes a small army to organize, judge, and moderate all the sessions.

# 3,604

#### REGISTRANTS

161 virtual only, representing **50 countries** 

1,053

#### **FIRST-TIME ATTENDEES**

639 were students

2,454

INDIVIDUAL PRESENTERS

58

**EXHIBITORS** 

including 4 local artisans

FOR THE FOURTH YEAR
IN A ROW students were the
largest category of attendees.

#### 2023 ENTOMOLOGY November 5-8 | National Harbor, MD



#### **SESSION STATS**

6 PROGRAM SYMPOSIA

47 SECTION SYMPOSIA

» MUVE Section: 13

» PBT Section: 9

» P-IE Section: 20

» SysEB Section: 5

» FIT Section: 8

57 MEMBER SYMPOSIA

13 ORGANIZED MEETINGS
(including Section
business meetings)

12 WORKSHOPS

9 MINI WORKSHOPS

#### PRESENTATION AND POSTERS

1.138 10-MINUTE PRESENTATIONS

» 547 in student competition

» 53 on-demand (virtual)

518 POSTERS & INFOGRAPHICS

» 197 in student competition

» 43 on-demand (virtual)

124 ON-DEMAND PRESENTATIONS

#### STUDENT COMPETITION

94 COMPETITION SESSIONS
1st & 2nd place winners for
every session = 188 student

winners

450 JUDGE AND MODERATOR VOLUNTEERS REQUIRED

#### **HIGHEST ATTENDED SYMPOSIA** (in alphabetical order):

Aphids: Recent Progress in Ecology, Diversity, Virus Transmission, and Management

Biological Control Introductions Against Invasive Pests: Celebrating the Career of Kim Hoelmer

Insect Biodiversity Loss: Empowering People and Policymakers to Address the Growing Challenge

Insect Conservation in Cities: Opportunities for Aligning Entomology, People, and Policy

Realizing the Potential of RNA Biopesticides: What It Takes to Make RNAi Commercial and Durable

**Thermal Ecology of Pollinators** 

## Meetings - continued

## Thank You to our Corporate Partners

for their generous support throughout the year.

















#### SUPPORTING LOCAL CHARITIES

ESA partnered with SocialOffset to support local charities and improve the local community where our annual meeting was taking place. **Ten donations, totaling \$485**, were made to DC Central Kitchen, Pathways to Housing DC, and Potomac River Conservancy.

#### **BRANCH MEETINGS**

(Attendance 1,943 total)



719 INTERNATIONAL

JOINT NORTH CENTRAL & SOUTHWESTERN

303 PACIFIC

312 SOUTHEASTERN

#### **BRANCH SPONSORS**

Thank you to **Corteva** for continued sponsorship of all Branch Meetings.

Corporate Branch sponsors that donated \$500 or more:

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## **UPDATE**

ESA's Chrysalis Fund encourages entomology education by awarding grants to K-12 teachers and other educators who use insects in the classroom to get kids excited about science.

**IN 2023, ESA AWARDED** 

11 GRANTS

**TOTALING** 

\$17,679

**RANGING FROM** 

\$200 - \$2,500

AT THE CLOSE OF 2023, THE CHRYSALIS FUND BALANCE WAS

\$170,239

## ESA Membership Demographics

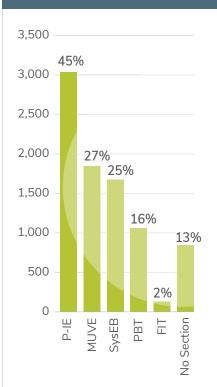








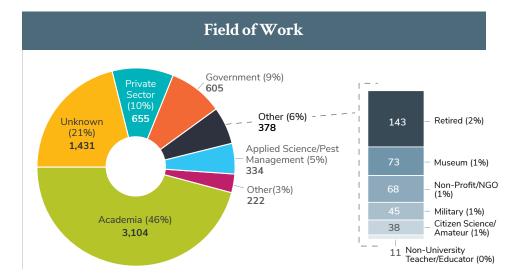
#### Membership by Section\*



\*Members may join more than one Section at no additional cost.

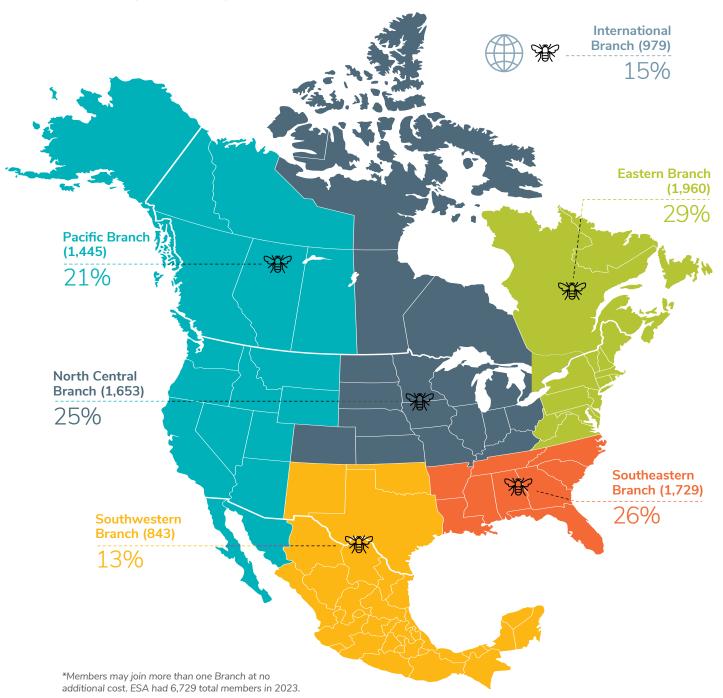
Note: In September, the Governing Board approved a new pilot section, Formal & Informal Teaching (FIT), with a 3-phase launch plan. Members can request to join the new Section by sending a message to esa@entsoc.org.

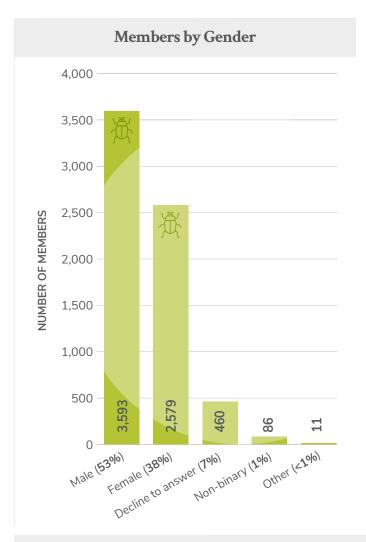
#### Membership Breakdown Regular 3,276 Members Student 2,018 Members Early-Career 923 Professionals Emeritus/ 361 **Emeritus Gold** Family Members Honorary Members 52 President's 23 Circle Developing 3 Country 0 500 1,000 1,500 2,000 2,500 3,000 3,500

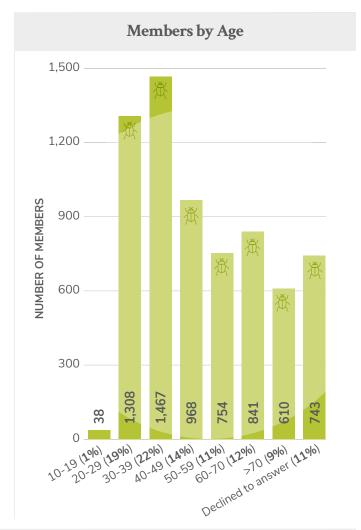


## ESA's Global Reach

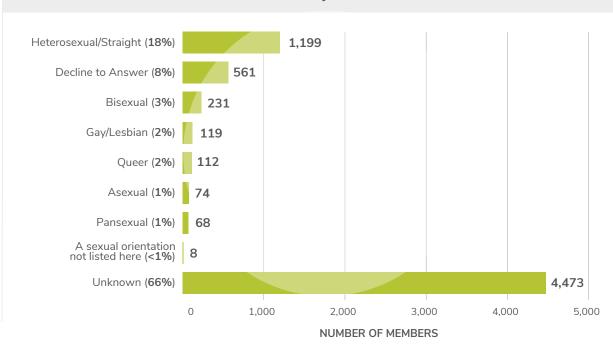
#### MEMBERS BY BRANCH\*

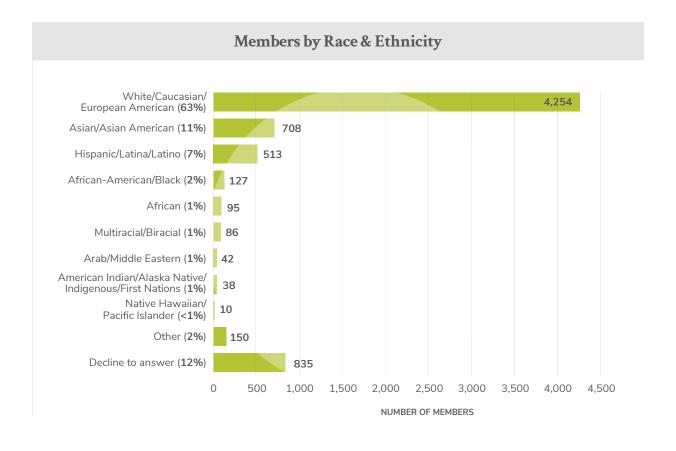


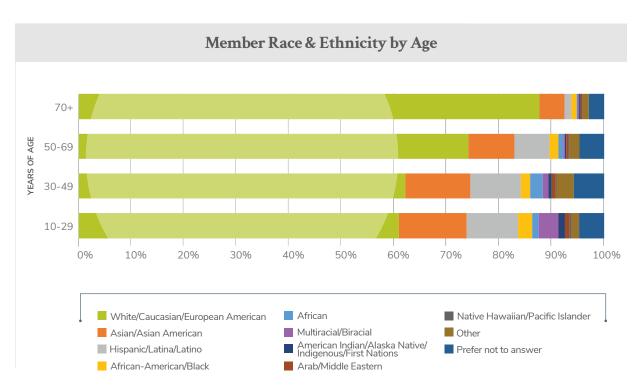




#### **Members by Sexual Orientation**







<sup>\*</sup>ESA updated our gender, race, and ethnicity categories in 2021.

## **Awards**

Congratulations to the recipients of ESA's 2023 Awards & Honors.

#### **Premier Awards**

**Fellows** 

Cassandra Extavour James Hagler Alvin M. Simmons Lukasz Stelinski Edward L. Vargo

Founders' Memorial Award Tracy Leskey

Douglas B. Walsh

Honorary Members S. Kris Braman Robert K.D. Peterson

#### **Professional Awards**

Award for Excellence in Integrated Pest Management John Palumbo

Distinguished Achievement Award in Extension Rufus Isaacs

Distinguished Achievement Award in Teaching
Rebecca Baldwin

Distinguished Achievement Award in the Promotion of Diversity and Inclusion in the Field of Entomology Laura Lavine

> Nan-Yao Su Award for Innovation and Creativity in Entomology Mary Gardiner

Science Communication Award – First Place Pollinator Education Toolkit, Elaine Evans

Science Communication Award – Runner Up Extensión en Español Blog, Anahí Espíndola and Macarena Farcuh

#### **ESA Certification Corporation Awards**

ACE Professional Award Randy McCarty

#### **Early Career Professional Awards**

Early Career Innovation Award
Zachary DeVries

ECP Extension, Outreach, and Engagement Award
Dalton Ludwick

ECP Research Award Isobel Ronai

ECP Teaching and Mentoring Award Kathryn Weglarz

Henry and Sylvia Richardson Research Grant Enakshi Ghosh

#### **Student Awards**

Alate Award Keiana Briscoe Genesis Chong

John Henry Comstock Award

Jessica Awad (International Branch)

Dowen Jocson (Pacific Branch)

Alex Orfinger (Southeastern Branch)

Hannah Quellhorst (North Central Branch)

Morgan Thompson (Southwestern Branch)

Hannah Tiffin (Eastern Branch)

Lillian and Alex Feir Graduate Student Travel Award in Insect Physiology, Biochemistry, or Molecular Biology Heena Puri

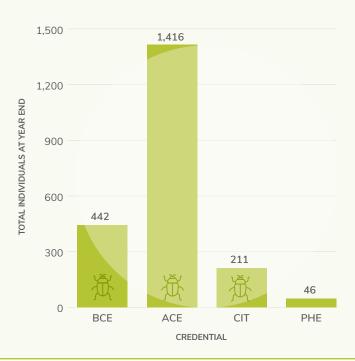
> Student Activity Award Hannah Quellhorst

The Larry Larson Graduate Student Award for Leadership in Applied Entomology Kushal Naharki

## Credentialing

#### ACE, CIT, PHE PROGRAMS GROWING

The year 2023 brought continued growth for three of ESA's four credentials. Engagement in the Associate Certified Entomologist (ACE) accelerated after slowing during the pandemic, the Public Health Entomology (PHE) program continued to grow, and the new Certified IPM Technician (CIT) program, launched in 2021, surpassed 200 credential holders by year-end. ESA certification staff visited several major industry conferences across the country to promote our programs. Looking ahead, in 2024 we will revise and update exam content, launch a new online learning platform to help credential seekers prepare for their exams, and continue to grow all four credential programs, including the Board Certified Entomologist (BCE).



## Ethics in Entomology

ESA's ethics policy calls for the publishing of an annual accounting of any ethics cases received by and reviewed by the Society, a practice intended to provide transparency to the policy and its enforcement and support positive ethical conduct. ESA continues to hold leadership positions in the Societies Consortium on Sexual Harassment in STEMM and is a recognized leader in promoting ethical conduct in science. In 2023, ESA received seven reports of potential ethical misconduct, and the Certification Corporation received two. This is comparable with the prior year. In 2023, the following cases were handled under the ethics policy for both the ESA and ESA Certification programs:

- One allegation reported in the media, was forwarded to ESA but not investigated, as the individual was not a member of the society.
- One allegation of misconduct by a professor was reported and investigated.
   Upon completion, the investigation exonerated the professor of all but a minor offense.
- Two incidents were reported during one of the Branch Meetings. The first was investigated and dropped several weeks later when new evidence emerged. The second was recorded but not investigated, as the allegations were against an unknown nonmember.
- One allegation was received and preventive action was taken. No investigation occurred.
- One allegation was received and documented but not investigated due to a lack of evidence and specificity.
- One allegation of scientific misconduct was reported but not investigated due to the nature of the allegation.
- Two additional cases are pending review with the Certification Corporation.





## Webinars







#### **MOST POPULAR 2023 WEBINARS:**

- 1. Learn From the Hiring Managers: Preparing Application Materials for Industry Careers (114 registrations)
- 2. Saying and Accepting No in Professional Workspaces: Hear From Your Entomology Peers (53 registrations)
- 3. ECP Career Track Series: Academia -Research/Extension (51 registrations)
- 4. ECP Career Track Series: Federal Government/Military (47 registrations)
- 5. Learn About Public Health Entomology Internships and Fellowships (47 registrations)

#### MOST POPULAR ON-DEMAND WEBINARS:

- 1. Learn About Public Health Entomology Internships, Fellowships, and Research Positions (2022)
- 2. Take Better Insect Photos: Tips From the Experts (2021)
- 3. There is No R in Entomology, But There is One in Reproducible (2015)

5. On the Horizon: New Findings in Tick Biology, Ecology, and Control (2022)



# Advocacy Builds to ESA's Inaugural "Swarm the Hill" Event in Washington, DC

By the start of the 118<sup>th</sup> Congress at the beginning of 2023, Capitol Hill had fully reopened, enabling ESA, the Science Policy Fellows, 2023 President Marianne Alleyne, and others to meet in person with legislative staff and the occasional member of Congress. ESA Advocacy wins in 2023 include:

- ESA Science Policy Fellows traveled to Washington, DC, for more than 30 meetings with Congress in May, and in September they participated in nearly a dozen meetings with federal agency program leaders and scientists as well as legislative affairs officials.
- The Science Policy Committee selected the next cohort of ESA Science Policy Fellows and organized the Annual Meeting program symposium, "Insect Biodiversity Loss: Empowering People and Policymakers to Address the Growing Challenge."
- **ESA endorsed** several pieces of bipartisan legislation, including:
  - » S.834/H.R.2385, Advancing Cutting Edge (ACE) Agriculture Act
  - » S.2580, Strengthening Mosquito Abatement for Safety and Health (SMASH) 2.0 Act
  - » S.1149, Recovering America's Wildlife Act of 2023 (RAWA)
  - » S.1238/H.R.3174, Invasive Species Prevention and Forest Restoration Act
  - » S.1555, Pollinator Power Act of 2023
- Grassroots advocates sent more than 500 letters to Capitol Hill through ESA's Advocacy Alerts tool, with representation from 45 states (see QR code).
- ESA awarded the inaugural "Champion of Entomology Award" to Sen. Dick Durbin (D-IL) for his outstanding work over the years supporting agricultural and public health research.



SCIENCE POLICY FELLOWS MEETING WITH APPROPRIATIONS RANKING MEMBER ROSA DELAURO (D-CT)



SWARM THE HILL EVENT IN DC

- The <u>ESA-Ramaswamy Science Advocacy Program Fund</u> launched in November to help support ESA's advocacy efforts.
- ESA led the first "Swarm the Hill" event, taking 44 entomologists from 11 institutions to Capitol Hill the day after the Annual Meeting in National Harbor, Maryland. The groups met with their respective elected members of Congress, as well as collectively with bipartisan representatives from both the Senate and House Agricultural Committees to discuss the Farm Bill. The long day was followed by an evening reception in the Russell Senate Building.



**Sign up and be the first to know** when ESA asks entomologists to contact their legislators about critical science policy needs. No matter your career level, any entomologist can complete an ESA Action Alert—and it only takes a minute or two!

## **Publications Highlights**

#### SUBMISSIONS INCREASE, REVIEW SPEEDS IMPROVE

- Journal submissions rose 9% in 2023, with all but one journal increasing.
- Five ESA journals are now in the top quartile of entomology impact factors, with Insect Systematics and Diversity having the highest score at 3.4.
- ESA's pool of journal editors continues to diversify. Forty percent of ESA's subject editors are women, up from 27 percent in 2019, and 20 percent of editors are from outside the U.S.
- Review speeds improved for the second year in a row. The average time to first decision declined to 29 days.
- Locating willing peer reviewers continues to be a challenge. On average, it takes 6 invitations to find 2 people willing to complete reviews.
- Digital versions of nearly all ESA books are now available online via BioOne. Free access is included with ESA membership.
- An Annotated Reprint of Yu. S. Balashov's 1972 Book Bloodsucking Ticks (Ixodoidea)—Vectors of Diseases of Man and Animals published in March.

#### ESA JOURNAL RESEARCH IN THE NEWS

Journal articles promoted by ESA appeared in publications including Wired, The New York Times, Gizmodo, Popular Science, Science News, Salon, Science Friday, The Daily Beast, Orlando Sentinel, and more.

## Grants and Equity



ESA is actively pursuing greater diversity and inclusion within the public health entomology workforce through Public Health Entomology for All, a collaborative agreement with the U.S. Centers for Disease Control and Prevention (CDC). In 2023, ESA successfully deployed three two-year fellows, five one-year fellows, and five

summer interns to contribute to the CDC Dengue, Arboviral, and Rickettsial Zoonoses Branches, as well as the Division of Parasitic Diseases and Malaria. Furthermore, four interns were placed at the Anastatia Mosquito Control District and Salt Lake Mosquito Abatement District. This collaborative effort also facilitated the participation of faculty and students from Florida A&M University, Southern University and A&M College, and Saint Augustine's University in the ESA Annual Meeting.

In another collaborative endeavor, ESA and the American Indian Science and Engineering Society (AISES) cohosted the second Indigenous Entomologists Gathering during the ESA Annual Meeting. This event was part of Indigenous Voices, a joint project with AISES and two other scientific societies that is supported by NSF BIO-LEAPS and aims to create cultural change in the biological sciences.

ESA's commitment to fostering pay equity and transparency took a step forward in 2023 with the growth of Insect Science Career Data. This salary-benchmarking platform launched in late 2022 enables entomologists to compare their compensation with others in the industry, contributing to a more equitable professional landscape.

## PHEFA BECOMES EFFECTIVE TRAINING PROGRAM

ESA commissioned Rockman et al. Cooperative to evaluate the effectiveness of the Public Health Entomology for All (PHEFA) program, the internship and fellowship program ESA launched in partnership with the U.S. Centers for Disease Control and Prevention in 2022. The evaluator concluded, "The PHEFA program has effectively empowered participants to become leaders and agents of change, enhancing their confidence as they navigate their professional and academic pathways. The program has broadened participants' career perspectives, provided valuable exposure to PHE, and developed essential skills." Follow the QR codes for more information.



EXECUTIVE SUMMARY



FINAL REPORT

### 2023 Donors

Thank you to the following individuals and organizations who generously gave financial contributions in 2023. Their support allows ESA to continue to serve the professional and scientific needs of entomologists and individuals in related disciplines throughout the world.

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Viviana Silvas Thomas Skelton Chelsea Smith Deborah Smith Society of Southwest Entomologists Kenneth Sorensen **Thomas Sparks Robert Stanton** Gary Steck Hannah Stout Holly Stuart Nan-Yao Su Sevgan Subramanian Evan Sugden Joseph Taylor Margaret Thayer William Tietien Kevin Tomita Malinda Tripp-Sampley Sawyer Urman Karen Vail Adam Vannest Kristen Vyas Sarah Waldron Astri Wayadande Donald Weber William Weed Pawel Witosinski Mark Wright Tabatha Yang

## Meet Your HQ Staff

The ESA headquarters team is here to help you get the most out of your ESA membership.

ESA MAIN LINE: 301-731-4535

#### **EOUITY AND GRANTS:**

Stacie East, x3030 • seast@entsoc.org
Diversity and Inclusion, Ethics, PHEFA Internships
and Fellowships, SAC, Insect Science Career Data,
Indigenous Voices

Elynn Owens, x3027 • eowens@entsoc.org Grants, Diversity, Equity, and Inclusion, PHEFA Internships and Fellowships, Indigenous Voices

#### **FINANCE:**

Neil Willoughby, x3005 • nwilloughby@entsoc.org Budget, Finance, Administration

Alexis Lyons, x3017 • alyons@entsoc.org Vendor Payments, Member Payments, Refunds

#### **MEETINGS, MEMBERSHIP, AND CERTIFICATION:**

Rosina Romano, x3010 • rromano@entsoc.org
Annual Meeting, Membership, Sections, Certification

Becky Anthony, x3018 • banthony@entsoc.org
Annual Meeting Program, Branch Meetings, Sections

Cindy Myers, x3001 • cmyers@entsoc.org Awards, Corporate Partnerships, Exhibits, Entomology Games

Mary Campbell, x3013 • mcampbell@entsoc.org Membership, Database, Elections

Danielle Tempesta, x3029 • dtempesta@entsoc.org Annual Meeting Submissions, Webinars, Membership, Student Affairs

Willet Hossfeld, x3026 • whossfeld@entsoc.org Certification, Education

Rebecca Martin, x3054 • rmartin@entsoc.org
Certification

## PUBLICATIONS, COMMUNICATIONS, AND MARKETING:

Matt Hudson, x3020 • mhudson@entsoc.org
Publications Council, Editorial Boards, Books,
Common Names

Jessica McEwan, x3023 • jmcewan@entsoc.org Journals, ScholarOne, Peer Review

Joe Rominiecki, x3009 • jrominiecki@entsoc.org Entomology Today, Social Media, PR

Laura Sparks, x3022 • Isparks@entsoc.org Website, Emails, Marketing

Irene Nudd, x3028 • inudd@entsoc.org

Journal Submissions, American Entomologist,
Insect Photos

Chloe Mullaney, x3021 • cmullaney@entsoc.org eNews, Email Subscriptions

#### **STRATEGIC INITIATIVES:**

Erin Cadwalader, x3025 • ecadwalader@entsoc.org Science Policy, Grand Challenges, Strategy, Leadership Development, Elections

#### FOR ALL OTHER INQUIRIES:

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Executive Director



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