

2019 ESA President's Corner Columns

Bob Peterson

Why Advocate Entomology?

January 2, 2019

The theme for [Entomology 2019](#) is *Advocate Entomology!* But why? I must admit to second-guessing my chosen theme. As entomologists, should we advocate—i.e., publicly support a cause or policy—when doing the science that we do?

Each year for the ESA Annual Meeting, the program committee encourages symposia that conform to the theme. Imagine a symposium title like, “Advocating life tables for understanding population dynamics of insects.” A little awkward, right? But, in thinking through the theme, a deeper understanding emerged for me. The lasting purpose of the theme is that we must advocate at all times because we are proud of our discipline, the people who practice it, and the contributions we make to save and improve lives. In doing so, we are not compromising our objectivity as scientists, educators, and professionals, nor are we throwing the scientific method under the bus.

In fact, by advocating entomology, we are bringing attention to the value of discoveries in our discipline. As one of our Society's three core [strategic principles](#) states, “ESA must increase its influence to realize our profession's full potential.” To realize our full potential and maximize our benefit to society, we must increase our influence—and to do that we must *Advocate Entomology!*

Empowering All Members

January 30, 2019

Because of the extraordinary time in which we are living, each of us has the unprecedented ability not only to think about solutions to problems but also to actually create tangible products that come from our thoughts. Moreover, we can share our solutions and products with billions of people in microseconds. Those people—in turn—can give us feedback and share their own ideas.

But where is ESA's fit in these exciting times? Our [strategic principles](#) provide a firm foundation for encouraging a culture that empowers all of our members to generate visionary ideas and innovate for the betterment of entomology and ESA. Therefore, your ESA can and should be a platform for all of us to rethink and reshape entomology.

What do we mean by "empowering all"? Decentralizing leadership is critical if we are to thrive as a discipline and a scientific society. Therefore, we need your leadership regardless of the number of years you've been a member, regardless of your job title, and regardless of your terminal degree. We need *ALL* of you now.

Why Innovate?

February 27, 2019

Although our theme at ESA this year is *Advocate Entomology!* and we have several initiatives around that theme, a very important corollary initiative is *innovation*. This year, we are embarking on some activities that we hope are only the beginning of creating a lasting culture of innovation at your ESA.

I hope you've seen announcements for our inaugural [Antlion Pit](#), a competition for you to pitch your innovative idea for an entomology-related product, technology, solution, process, or service. The yearlong activities will culminate at Entomology 2019 in St. Louis with an entertaining pitch competition—think *Shark Tank*, but for entomology. In my next President's Corner column, I'll discuss the Antlion Pit in more detail.

At our upcoming summer meetings of the Annual Meeting Program Committee and the Governing Board, we are having an Innovation Day during which we will generate and share ideas that have the potential to reshape entomology and ESA. In a future President's Corner column, you'll see much more about this effort.

But, I still need to address the question that is the title of this column: Why is innovation so important for entomology and ESA? We are experiencing astonishing advances in technology, dramatic changes in demography, and disruption of hierarchical structures in nearly every sphere of human activity. Innovation is more crucial than ever to advance entomology into the 21st century and for us to continue to benefit the public. ESA is fortunate to have members who possess immense intellectual capital. When this intellectual capital is combined with a commitment from ESA to encourage a culture of innovation, profound results can occur that can be of benefit to you, entomology, and society.

Calling All 'Ento-preneurs' to the Antlion Pit

March 27, 2019

In the [last President's Corner](#), I discussed the importance of creating a lasting culture of innovation at your ESA. A very important part of this emphasis on innovation is our inaugural Antlion Pit. This is a competition for you to pitch your innovative idea for a chance to win a significant cash prize that will allow you to further develop your idea.

In planning for our initiatives this year, several of us discussed potential fun and impactful activities to further the cause of innovation. This led us to the idea of doing a spinoff on the popular TV show *Shark Tank*. Rayda Krell, annual meeting program co-chair thought of the name Antlion Pit. We are also very fortunate that Marianne Alleyne has agreed to lead Antlion Pit. She has a lot of experience in design processes and venture creation.

Pitch competitions are increasingly popular for people to share and further develop creative ideas. Our competition encourages the development of the entrepreneurial spirit through idea leadership, innovation, teamwork, and mentorship. We have a [series of webinars](#) this year for anyone who wants to learn more about the innovation process. The yearlong activities will culminate at [Entomology 2019](#) in St. Louis with the entertaining pitch competition.

Antlion Pit is for all ESA members. Do you have a great idea? Do you want to learn how to take your idea to the next level? Do you want a chance to win \$5,000 or \$2,500? Then enter the Antlion Pit. See www.entsoc.org/events/annual-meeting/antlion-pit for much more information, including entry rules and deadlines.

ESA as a Platform

May 8, 2019

I have recently finished attending the slate of ESA Branch Meetings for 2019. The highlight of the year for me so far has been attending all of the Branch meetings and visiting with so many of you. At each meeting, I was able to deliver a brief presentation, and one of the slides in my presentation had the text, “Your ESA as a platform for leadership on innovation, ideas, and advocacy.” But what do we mean by “platform”?

In 2017, I had the privilege of participating in the Science Policy Field Tour, “Balancing Pest Management and Pollinator Health,” in Mississippi. The tour was organized by our Plant-Insect Ecosystem (P-IE) Section in cooperation with Mississippi State University. During the three-day event, several participants who were not ESA members repeatedly mentioned that ESA was uniquely positioned to organize the event because it had the credibility to gather diverse stakeholders who otherwise would not get together.

At the very end of the tour, it hit me like the sting from a velvet ant: ESA can be a synergizing platform that empowers those who want to advocate, influence, invent, innovate, and lead for all things entomological. ESA *itself* has the clout and credibility to provide a stage where members and non-members alike can initiate and undergo transformational change.

In addition to successful field tours by our Sections in 2017 and 2018, ESA has been a platform for advocacy through our Grand Challenges summits on *Aedes aegypti* and invasive insect species. And the *Antlion Pit* Competition ([subject of the last President’s Corner](#)), is also an example of an ESA platform. That is, the pitch competition allows people to innovate in creative ways that would not be possible without sitting on the ESA platform.

Thinking about—and acting on—ESA as a platform helps us create a lasting culture of innovation at your ESA. An innovation culture leads directly to empowerment of all of our members, which in turn allows us to rethink and reshape entomology.

Why Rethink and Reshape Entomology?

May 22, 2019

I ended the [previous President's Corner](#) with, “An innovation culture leads directly to empowerment of all of our members, which in turn allows us to rethink and reshape entomology.” But why do we need to rethink and reshape entomology? As entomologists, *we* need to be the prime movers for our discipline as it evolves in the 21st century. Those who are not entomologists of course should have input into how our discipline evolves, but we need to take primary responsibility for charting *our* future.

Is entomology being reshaped? After seeing numerous presentations at the 2019 Branch meetings, I think I can answer that with a resounding “YES.” I saw presentations showing unbelievably sophisticated research and instrumentation that wasn't even imagined a small handful of years ago. Imaging, sensors, data analytics, artificial intelligence, and other tools, when combined with our members' immense intellectual capital, are producing a 21st-century entomology and entomologists that will be able to solve seemingly intractable problems. There has been a lot written about the current and future “augmented worker.” It is obvious that the same concept extends to the “augmented entomologist.”

But what is ESA's role? As I mentioned in the previous President's Corner, ESA is uniquely positioned to be a synergizing platform that empowers those who want to advocate, influence, invent, innovate, and lead. This platform has the potential to reshape not only the careers of entomologists but also the future of entomology.

What is Idea Leadership?

June 19, 2019

In [previous President's Corners](#), I've used the term *idea leadership* alongside *innovation*, *empowerment*, *advocacy*, *influence*, *intellectual capital*, and *platform*, but I've never discussed it. Like many of you, I've seen the terms *thought leadership* and *thought leader* used over and over. In fact, *thought leader* is overused; it's right up there with *think out of the box*. So, I wanted to use a slightly different and less frequently used term.

Idea leadership is essentially the same as *thought leadership*. The term is meant to reflect a couple of important attributes. We are living at a time when great ideas and execution of those ideas are everything. People who generate great ideas need leadership opportunities and also need ways to get their ideas heard and implemented.

Empowering all of you not only to have your great ideas heard but also to become leaders is key to entomology's future. The culture of innovation that ESA is now creating will bear the fruit of idea leaders who will reshape entomology.

But leadership goes well beyond idea leadership. Regardless of your career choice or career-track, leadership skills that are not often taught as part of a formal education—especially in the sciences—are and will be incredibly valuable to your success. Author Tom Friedman has called these “STEMpathy skills.” They’ve also been referred to as “soft skills”—although everyone knows that they are hard! Examples include emotional intelligence, conflict resolution, self-awareness, talent management, self-confidence, time management, mentorship, teamwork, and patience. These leadership skills and others not only will be critical to your success, but they will also be critical to the future success of ESA and entomology.

Innovation Day

July 17, 2019

Each summer, the ESA Annual Meeting Program Committee meets to plan your Annual Meeting, and the Governing Board meets to conduct the business of governing your Society. It doesn’t happen every year, but some years we also have a Strategy Day in which members of your leadership community discuss bigger issues affecting ESA.

This year, we did something different: Innovation Day. Program Committee, Governing Board, Branch, and Early Career Professional leadership as well as a small group of members who are visionary thinkers descended like a plague of locusts on a great location in St. Louis called [Filament](#). The idea behind Innovation Day was to begin the process of creating an innovation culture at ESA. To that end, we were facilitated by Filament’s excellent professionals through a structured environment in which participants were encouraged to come up with and freely share ideas that have the potential to reshape ESA and entomology. The focus for the day was on positivity, possibility, visionary thinking, and inspirational ideas.

A big part of the meeting was imagining our entomological future by considering five attributes of entomologists: the augmented entomologist, the educated entomologist, the influential entomologist, the collaborative entomologist, and the accidental entomologist.

We discussed technologies and societal changes that can empower us to be better educators, researchers, influencers and collaborators—changes that may very well radically alter how, when, where, and why we do our work. We discussed careers outside of academia and the needs of the 21st century entomologist, regardless of career path.

Through powerful group exercises and a fun and informative visual note-taking process, we generated many ideas that may be pursued either formally by ESA or by members and others who want to lead now. Indeed, this is exactly what I meant by *idea leadership* in [last month’s President’s Corner](#)!

You’ll be seeing more about Innovation Day soon, so stay tuned.

The Evolving ESA Membership and Careers Outside of Academia

August 14, 2019

From its beginning, ESA has been structured primarily for academics and other researchers. We publish scientific journals and we hold an Annual Meeting and Branch Meetings traditionally and fairly narrowly devoted to reporting results of entomological research. That model has served us well, and I would argue it has to remain at the very core of what we do because, without new entomological knowledge in the form of research, there wouldn't be much point to the professional scientific society that is ESA.

But, both our membership and careers in science are undergoing significant change, and we must be prepared for the changes we are already seeing. Recent studies show that those who have earned Ph.D.s either already outnumber Ph.D.s in academia or they will soon. Indeed, more biology Ph.D.s already have careers outside of academia than in academia. In addition, more and more professionals with Ph.D.s are choosing careers that are not directly involved in research. We must remain a professional home for trained entomologists pursuing important careers beyond the track we have traditionally served.

Consequently, your ESA recognizes these changes and is adapting. Fortunately, your ESA staff does a great job tracking member statistics, and many of you have spoken up in recent years about the need for ESA to have programs tailored to careers outside of academia and research. We hear you, and your ESA leadership community will be addressing your needs in the very near future. At the June 2019 meeting of the ESA Governing Board, we authorized an initial study of the needs of entomologists pursuing these career paths and how the Society can help prepare and support them. And, for those of you like me who are primarily involved in entomological research and education in academia, these new efforts will not be at the expense of what we do, but rather they will be additive to what ESA does. Addressing the needs of our evolving membership's diverse career needs will be of benefit to all.

Disruption and the Future of ESA and Entomology

September 11, 2019

Disruption of industries, disruption of technologies, disruption of markets, disruption of politics. The term *disruption* is everywhere in today's lexicon. In fact, the word is so overused that people are arguably becoming numb to it and its continued significance.

But we become numb to disruption at our own peril. As I mentioned in the February President's Corner, "[Why Innovate?](#)", "We are experiencing astonishing advances in technology, dramatic changes in demography, and disruption of hierarchical structures in nearly every sphere of human activity." Massive disruption of education, research, publishing, communications, and other things that help define our profession are happening *now*. Disruption is constant; there will be no let up.

ESA and entomology must embrace disruption—and encourage it—if we are to thrive in the 21st century. We must be the disrupters, not the disrupted. We must rethink and reshape entomology. But how?

I believe a strong culture of innovation among entomologists and within ESA's societal fabric is the key. A strong culture of innovation depends on people actively engaged in *disruptive innovation*. In addition to our theme *Advocate Entomology!*, innovation has been an ever-present initiative this year through the Antlion Pit, Innovation Day, idea leadership, and other venues.

As members of ESA, you should feel empowered to lead, disrupt, and innovate. Your ESA can help you and entomology by providing you with a synergizing platform to achieve your goals. Together, ESA, its members, and all entomologists can remain and become more relevant and vital to the public.

Erica McAlister, Entomology Advocate Extraordinaire

October 9, 2019

For the past several years, ESA and its many devoted members have emphasized science communication. So, for the last two annual meetings our opening plenary speakers have been professional science communicators, not entomologists. But this year it made perfect sense to combine science communication and entomology by inviting Dr. Erica McAlister to give the featured presentation at the opening plenary session of Entomology 2019 in St. Louis.

Erica seamlessly combines her profession as a dipterist and senior curator at the Natural History Museum in London with advocating for entomology, mostly by tirelessly communicating to the public about the amazing world of insects. She is a master of social media, using humor to capture the public's interest in insects, biology, and science in general. Follow her entertaining Twitter posts at [@flygirlNHM](https://twitter.com/flygirlNHM).

Erica has appeared on TV, radio, and podcasts, as well giving talks at science festivals, international nature fairs, and wildlife organizations. In 2017, she published the book, [*The Secret Life of Flies*](#). I waited impatiently for my copy to arrive as it was being published, and after reading it I thought it was not only a worthy successor to Harold Oldroyd's classic, *The Natural History of Flies*, but that it was also in the top group of natural history books ever published.

More on Erica can be found [on the Entomology 2019 website](#). I'm looking forward to her presentation at Entomology 2019 and I hope you are too. She is the epitome of an accomplished professional entomologist who is also a passionate science communicator and advocate extraordinaire for our discipline.

Are You Ready to Advocate Entomology?

November 6, 2019

What a year! It has been a privilege and honor for me to serve as your president. In all of my travels this year, the absolute highlight was speaking to so many of you. Despite all of the uncertainties surrounding science policy, science funding, and public support for science in general, what I found most remarkable in my interactions with you was your rock-solid commitment to entomology and your unbridled optimism for the future. Indeed, your positive comments reminded me of why I decided to become an entomologist and supercharged my own commitment to champion and advocate for our discipline.

Concomitant with the theme of *Advocate Entomology!* this year were initiatives focused on nurturing an innovation culture among members, empowering all members to move the world, and positioning ESA to be a synergizing platform for all members to achieve their professional goals. With these initiatives and our ceaseless advocacy, we are well on our way to rethinking and reshaping entomology as we move inexorably into the 21st century. As I have mentioned before, it is far better for us to chart the future of entomology than to have it charted by those who are not entomologists.

So, as we prepare for and travel to Entomology 2019 in St. Louis this month, I hope you are ready to *Advocate Entomology!* Thank you for making 2019 a very special year.