# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message to the ASTA Membership</td>
<td>1</td>
</tr>
<tr>
<td>Strategic Goals &amp; Key Focus Areas</td>
<td>2</td>
</tr>
<tr>
<td>FY 2019-20 Leadership</td>
<td>3</td>
</tr>
<tr>
<td>State &amp; Local Issues</td>
<td>4</td>
</tr>
<tr>
<td>Federal Legislative &amp; Regulatory Affairs</td>
<td>5</td>
</tr>
<tr>
<td>Plant Breeding Innovation Policy</td>
<td>6</td>
</tr>
<tr>
<td>International Programs and Policy</td>
<td>7</td>
</tr>
<tr>
<td>Global Seed Movement</td>
<td>9</td>
</tr>
<tr>
<td>Communications</td>
<td>11</td>
</tr>
<tr>
<td>Intellectual Property</td>
<td>14</td>
</tr>
<tr>
<td>ASTA Affiliates &amp; Partners</td>
<td>15</td>
</tr>
<tr>
<td>Conventions &amp; Meetings</td>
<td>18</td>
</tr>
<tr>
<td>2019-20 Membership Breakdown</td>
<td>20</td>
</tr>
<tr>
<td>Financial Position</td>
<td>21</td>
</tr>
<tr>
<td>ASTA Staff</td>
<td>22</td>
</tr>
<tr>
<td>Organizational Chart</td>
<td>23</td>
</tr>
</tbody>
</table>
Message to the ASTA Membership

On behalf of the ASTA Board of Directors and staff, we are pleased to present to you the ASTA FY 2019-20 Annual Report. It’s certainly been an unprecedented year, and we can’t thank you enough for your continued support throughout it all.

Our industry has a long, proud legacy of hard work and dedication. Time and time again, we have stepped up to the challenge, finding new and innovative solutions to meet the needs of farmers and consumers. And this past year has certainly been no exception. As the world was hit with a global pandemic, this industry demonstrated its essential and critical role in providing the seed for farmers to produce the food, feed, fiber and fuel on which we all rely. We’ve never been more proud to be a part of this great industry, and this strong association which brings us all together to meet these common challenges.

The collaborative and unifying voice that ASTA brings is especially important during trying times like we are now facing. Our staff are in constant communications with key government agencies and departments to relay the issues and challenges facing our industry at this time – from transportation, to workforce issues and economic relief. They are coordinating with partners and stakeholders at the state, federal and global levels. They are holding open COVID-19 calls and webinars with members to identify issues and share ideas, not only for operations today, but for the long term. And through it all, the important daily work of the association has continued.

Ensuring a strong future for plant breeding innovation has been a top priority for ASTA; and this past year, USDA rolled out its final Part 340 rule – an important step in providing clarity around regulatory policy on genetically engineered organisms. ASTA continues to work closely with lawmakers, industry and food and ag stakeholders at the domestic and international levels to support a clear, science- and risk-based regulatory system and to engage consumers in a dialogue about the benefits of these innovations for our planet, our health, and our food.

After much hard work on behalf of the industry, ASTA was successful in gaining all 20 tariff exclusion requests for seed products that are imported into the US from China. This means that seed entering the U.S. from China between September 24, 2018 and August 7, 2020 did not need to pay the 25% tariffs, and those that did were able to receive refunds.

ASTA’s first PLDC Virtual was a huge success, breaking records for summer conference participation. We hope you were able to participate; and if not, that you’ll take time to catch the sessions which are recorded and available for viewing on the ASTA website.

These are just a few examples of the work the association is doing on your behalf – during both good and challenging times. We can’t do any of this without you. Thank you for your continued engagement in your association, both through your time and your financial support. And thank you for all you do in ensuring “better seed, makes better lives” – for everyone.

It’s an honor to represent you, and we wish you all the best for the year ahead. We know that whatever comes our way in the future, our industry will do what it has always done: we will continue improving, finding new and better ways of doing things, and fulfilling our critical mission of supplying the seed that is the root of life.

Andrew LaVigne
President & CEO

Wayne Gale
Chair FY 2019-20
ASTA’S VISION
To contribute to global agriculture and food security by creating an environment where each ASTA member company has the opportunity to create an innovative, sustainable and successful business.

ASTA’S MISSION
ASTA is the leading voice of action in all matters concerning the development, marketing and movement of seed, associated products and services throughout the world. ASTA promotes the development of better seed to produce better crops for a better quality of life.

ASTA’S CORE VALUES
Members drive the ASTA agenda and identify the issues relevant to the seed industry. ASTA’s commitment to one company, one vote ensures that issues affecting the many are identified and result in effective and proactive advocacy and support.

STRATEGIC FOCUS AREAS

Domestic Policy
Be the leading voice on domestic policy issues impacting the seed industry. Continue to grow and enhance the ASTA comprehensive government affairs program and regularly engage and communicate with members and stakeholders on federal, state and local issues. Determine action on active issues where ASTA leads, supports or monitors.

Innovation
Strive to develop a domestic and international environment that facilitates innovation throughout the seed industry.

Communications
Establish ASTA as the leading voice for the U.S. seed industry, demonstrated by its position as the go-to source on seed issues for consumers, ASTA members, member organizations, legislators, regulators, media, and other stakeholder groups.

Intellectual Property Rights
Advance the use and respect of intellectual property rights (IPR) protection for the seed sector globally.

International
Improve the opportunities for ASTA member companies to do business in international markets.

Membership & Internal Matters
Maintain and grow strong plans for: membership retention, engagement and recruitment; meetings structure and management; and human and financial resource management to ensure the key issues of membership are addressed through a sound association foundation.
FY 2019-20 Leadership

From left to right: John Latham, Wayne Gale, Brad May.

REGIONAL VICE PRESIDENTS
Crystal Rose-Fricker (Northwest)
Pure Seed
John Romines (North Central)
WinField Solutions
David Pearl (Central)
The CISCO Companies
John Bozeman (Northeast)
Seedway
John Seymour (Southeast)
Roundstone Seeds
Coby Kriegshauser (South)
Scott Seed Co.
Rick Falconer (West)
Rijk Zwaan
Jim Schweigert (Representative to CSTA)
Gro Alliance, LLC
Angel Saavedra (Representative to AMSAC)
Corteva Agriscience

DIRECTORS-AT-LARGE
Kim Alberty, Agassi Seed & Supply
Dave Armstrong, Sakata Seed America, Inc.
Brian Barker, Corteva Agriscience
Mike Lewis, Bayer
Dave Treinen, Syngenta/GreenLeaf
Curtis Wiltse, Beck’s Superior Hybrids

CHAIR
Wayne Gale, Stokes Seeds

FIRST VICE CHAIR
John Latham, Latham Hi-Tech Seeds Inc.

SECOND VICE CHAIR
Brad May, BASF

IMMEDIATE PAST CHAIRS
Jerry Flint, Acuity Consulting LLC
Tracy Tally, Justin Seed Co., Inc.
Mark Herrmann, AgReliant Genetics, LLC

DIVISION CHAIRS
Scott Plagman (Soybean)
Corteva Agriscience
David Bubeck (Corn & Sorghum)
Seedway LLC
Dale Krolkowski (Vegetable & Flower)
Germaines Seed Technology, Inc.
Craig Nelson (Associate Member)
Eurofins
Lisa Steere (Brokers/Agents)
Peterson Genetics, Inc.
State & Local Issues

As with every other aspect of the seed industry, state legislative sessions in FY 2019-20 felt the impact of COVID-19. Most state legislative sessions either adjourned early or were postponed, leaving all but the mandatory actions untouched. However, there were still significant activities for the industry at the state level.

As expected, the challenges in the states tended to focus on: crop protection and seed treatments; funding of enabling state infrastructure; anti-technology initiatives; and various crop-specific issues. ASTA continued to use grassroots action by its membership and state agribusiness associations to affect state legislation, along with engaging cooperative efforts with the state agriculture department commissioners, directors, and secretaries. The association also continued to coordinate and complement action with the state and national Farm Bureaus and other commodity groups.

A couple of states passed significant legislation for the seed industry. West Virginia revised and updated its state seed law. The seed control program in Colorado underwent a Sunset Review, which is an evaluation of the need for the continued existence of the program and a consideration of its effectiveness and performance. A few positive changes were suggested and approved; the agency received a positive nod to continue the program with the next review in 11 years.

Another significant change during the year involved the revision of the Federal Seed Act Regulations, which directly impacts interstate seed transactions. ASTA members were consulted throughout the process and collectively supported the changes, as noted in ASTA’s comments on the rules as finalized. Those changes and ASTA’s comments can be found on ASTA’s website. These are the first changes to the regulations in over 10 years.

ASTA will continue its focus on grassroots involvement as the states evolve into post-COVID decision-making to ensure membership positions are heard and considered.
Federal Legislative & Regulatory Affairs

FARM BILL IMPLEMENTATION
FY 2019-20 saw progress on a number of initiatives that ASTA supported in the 2018 Farm Bill.

USDA announced final rules to implement changes to the Plant Variety Protection Act regulations which ASTA sought in the 2018 Farm Bill. The change allows asexually propagated material to receive a PVP certificate from USDA. ASTA provided input to USDA as the rules were developed to create an accessible system to store these materials.

USDA published regulations to provide federal regulatory oversight of the production of hemp in the United States. The regulations create a system to approve plans submitted by states for the domestic production of hemp. Many states have already had these plans approved.

USDA submitted a report to Congress on plant biostimulants outlining paths that both Federal and state agencies could take to create a more coherent regulatory system for biostimulants.

GEM APPROPRIATIONS
Congress’ FY 2020 final budget included a $1 million increase in the baseline budget for the Germplasm Enhancement of Maize (GEM) project, which is housed under USDA’s Agricultural Research Service. For over a decade, ASTA has supported this increase by organizing annual lobbying trips for GEM cooperators.

The GEM project is focused on adapting exotic corn germplasm for use in the U.S. and identifying useful genetics in exotic landraces to develop new hybrids. It is a public-private partnership that is heavily supported by ASTA and the corn seed industry.

This increase in funding will bring GEM’s baseline budget up to $2.8 million dollars and will allow the two program sites – housed in Ames, Iowa and Raleigh, North Carolina – to update equipment and facilities in order to keep pace with research needs.
Plant Breeding Innovation Policy

GOVERNMENT ENGAGEMENT
Throughout the year, ASTA engaged with the U.S. government to encourage a science-based and consistent policy for plant breeding innovation (PBI) across the government. Additionally, ASTA advocated for continued international engagement by the U.S. government. In May 2019, the USDA Animal Plant Health Inspection Service (APHIS) published, for public comment, a proposed rule to revise and update the agency’s biotechnology regulations. ASTA, through its Plant Breeding Innovation Working Group, provided comments on the proposed regulations. In its comments, ASTA indicated it was pleased that the USDA proposal recognized that some applications of gene editing result in plant varieties that are essentially equivalent to varieties developed through more traditional breeding methods and would thus treat these varieties in the same way from a policy standpoint.

While ASTA supports the exclusion of these specific categories of products from an additional pre-market review under Part 340, the association offered some recommendations relating to the definitions, structure and language of these exemptions. On May 14, 2020, APHIS announced the availability of the Final Rule for its biotechnology regulations which they call the SECURE rule, which stands for Sustainable, Ecological, Consistent, Uniform, Responsible, Efficient. This represented USDA’s implementation of the White House Executive Order on Modernizing the Regulatory Framework for Agriculture Biotechnology Products. ASTA continues to advocate for the Environmental Protection Agency and the Food and Drug Administration to implement their part of the Executive Order.

VALUE CHAIN COLLABORATION
ASTA continues to take a leadership role in working with members of the domestic agriculture value chain, as well as international partners, toward the goals of international alignment of science-based policies across countries and information-sharing across the value chain.

In February 2020, in collaboration with the National Association of Plant Breeders, the Plant Breeding Coordinating Committee and University of California-Davis, a Plant Breeding Symposium was held to highlight the scientific advances in plant breeding and how emerging methodologies are used within breeding programs. The target audience for the symposium were U.S. government officials.

INTERNATIONAL EFFORTS
ASTA’s Senior Vice President for Innovation Bernice Slutsky continues to serve as Chair of the International Seed Federation (ISF) PBI Working Group to work toward alignment across countries. To that end, ASTA has collaborated with ISF in hosting and participating in several international events. In July 2019, in collaboration with ISF, a side event was held in Geneva at the WTO’s SPS Committee meeting. ASTA participated in meetings in Japan in November 2019 to discuss aspects of their policy for PBI. In June 2020, ASTA, in collaboration with ISF and the China Seed Association, helped to organize a virtual meeting in China on gene editing.

ISF also held several meetings and webinars with the International Grain Trade Coalition to discuss and develop guidance for their members on information sharing across the value chain.
International Programs and Policy

ASTA’s international programs and participation in international and regional organizations help drive policies that impact the U.S. seed industry globally.

REPRESENTING U.S. SEED INDUSTRY GLOBALLY

Collaboration with national and regional seed association partners remains a high priority. During the year, ASTA co-hosted a Cross-Border Workshop with the Mexican Seed Association (AMSAC), focusing on phytosanitary challenges between the U.S. and Mexico. In Brazil, ASTA worked with ABRASEM to host a workshop with government partners to launch a systems approach pilot project. In Europe, ASTA partnered with Euroseeds on a series of webinars highlighting plant breeding innovation research. Together with two seed associations in China and the International Seed Federation (ISF), ASTA collaborated on the third Seminar on Plant Breeding Innovation, held virtually. ASTA also conducted an Import-Export Workshop in Pacific Northwest to discuss practical seed movement issues with U.S. Customs and Border Patrol, APHIS, and the Port Authority.

ASTA continues to play a leadership role at ISF, with members and staff representing ASTA on all committees, section boards, and working groups. ASTA also has executive committee positions on the Asia and Pacific Seed Association (APSA), Seed Association of the Americas (SAA), and African Seed Trade Association (AFSTA). Members represent ASTA as industry observers at meetings of the Organization for Economic Cooperation and Development (OECD) Seed Schemes, International Union for the Protection of New Varieties of Plants (UPOV), International Plant Protection Convention, FAO Farmer’s Rights meetings, and International Treaty on Plant Genetic Resources for Food and Agriculture.

ASTA’s First Vice Chair John Latham represents ASTA at the U.S.-China Phase 1 trade agreement signing ceremony at the White House.
International Programs and Policy Continued

REPRESENTING U.S. SEED INDUSTRY IN WASHINGTON, D.C.

ASTA advocates for U.S. trade policies that reduce barriers, improve market access, and allow for the free movement of seed across borders. ASTA filed 20 tariff exclusion requests on behalf of members importing vegetable and flower seed from China that were impacted by 25% tariffs. The exclusion requests were approved by the Office of the U.S. Trade Representative for a 2-year period. Companies received retroactive duty refunds from September 24, 2018 to August 7, 2020.

The International Executive Committee visited Congress to advocate for the passage of the U.S.-Mexico-Canada agreement (USMCA). USMCA entered into force in July and contains important provisions related to intellectual property rights, phytosanitary policy, and plant breeding innovation. Mexico and Canada are the top countries for U.S. seed exports and imports.

ASTA continues to share priorities for future trade negotiations and key seed issues with USDA and USTR, including calls this spring with Undersecretary for Trade and Foreign Agriculture Affairs Ted McKinney, and letters of support for new trade agreements.

International meetings during the COVID pandemic pivot to online platform.
Global Seed Movement

ASTA has been active at the global level to work toward global harmonization of phytosanitary measures. The association has partnered with ISF, SAA, APSA, APHIS, NAPPO, and other organizations to influence the development, adoption, and implementation of international phytosanitary standards and other programs to create a more predictable trading environment.

Working with a coalition of industry and government phytosanitary experts from six countries, ASTA helped develop a proposal to create an annex to the new international seed standard (ISPM 38) that will provide guidance needed by NPPOs to utilize the systems approach as a phytosanitary measure in lieu of consignment-by-consignment phytosanitary certification. The project was ultimately accepted by the International Plant Protection Convention (IPPC), and an IPPC expert working group will be established later this year to begin the drafting process. ASTA co-sponsored a NAPPO international hemispheric workshop on the implementation of ISPM 38 that was held in Costa Rica last March and supported and participated in several other ISPM 38 implementation workshops in conjunction with SAA and the Mexican Seed Association, AMSAC.

A SYSTEMS APPROACH

The systems approach offers a potential alternative to consignment-by-consignment phytosanitary certification whereby seed companies will be able to become accredited by governments to move seed internationally based on the strength of their seed quality management practices in managing overall phytosanitary risk to acceptable levels. ASTA and USDA have partnered to develop a systems approach initiative called ReFReSH (Regulatory Framework for Seed Health) which represents the first effort to actually implement the systems approach for seeds. Significant progress has been made which includes the development of a concept paper, an accreditation standard, and a manual that will be used by seed companies to develop their petitions for accreditation. The development of pilot projects to test this concept with APHIS and several interested NPPOs is now underway. ReFReSH is being used by ISF (with ASTA as a contributor) as a model for the development of a global concept that will be used to help design the ISPM 38 annex.

ASTA has continued its efforts to contribute toward the development of the ISF Regulated Pest Database (organized by commodity) as well as further expand its own pest database (organized by pest species). These databases provide centralized repositories of essential technical information on pests that are used to help NPPOs with pest risk assessments that ultimately reduce the number of pests that are regulated. They also serve as a ready resource of information to aid in the release of held or rejected shipments for pests which are not technically justified. Over the past year, ASTA has added over 200 pests to its database, and has contracted for the development of new software that will increase its usefulness by its members.

NATIONAL SEED HEALTH SYSTEMS

ASTA has continued to coordinate with APHIS to help improve the National Seed Health System, and further develop the National Seed Health Accreditation Pilot Program (NSHAPP) for eliminating the threat of CGMMV in California. In addition, the phytosanitary risk reduction model, originally designed for the management of bacterial canker of tomato under a systems approach, is being expanded to include CGMMV and two fungal pathogens, black leg of brassicas, and gummy stem blight of cucurbits. This will increase the utility of the model for many other seed species as it will then include the major categories of pathogens: viral, bacterial, fungal.
Global Seed Movement Continued

EMERGING PHYTOSANITARY ISSUES

Several major challenges emerged that have significantly impacted seed movements in several seed sectors. In late 2018, a new virus of tomato, tomato brown rugose fruit virus or ToBRFV, emerged as an international issue. NPPOs of many major trading partners including Mexico, Korea, Australia and Turkey, quickly imposed new seed health testing requirements as a condition of entry based on methods that have not been fully developed and evaluated. In response, ASTA organized a special session at its 2019 Vegetable and Flower Seed Convention in Orlando that brought together industry and academic experts to help develop a path forward. A major outcome has been the development of two key research projects funded by ASTA members through ASRF that will focus on the development of a universal molecular test method and needed information on the epidemiology and management of this new virus.

Another major emerging issue is the recent detection of potato spindle tuber viroid (PSTVd) and more recently several related pospiviroids in tomato and pepper seed grown overseas and imported into the U.S. or re-exported through the U.S. Although these viroids do not appear to impact tomato or pepper production, nevertheless they are all considered quarantine pests by APHIS. An emergency Federal Order was issued in August 2019 by APHIS requiring seed entering the U.S. from any country to be tested off-shore prior to entry, which will have a massive impact on the tomato and pepper seed industry at a global level. ASTA has been working with APHIS through a joint Urgent Seed Issues Team (USIT) working group to develop options for companies to reduce the impact this new requirement will have on this seed sector valued in the hundreds of millions of dollars and ultimately conduct a pest risk assessment and a domestic survey to determine if the Federal Order can be adjusted based on actual risk of seed to serve as a pathway.

In July 2019, ASTA set up a mechanism to coordinate the development of official responses and comments to notices of changes in phytosanitary requirements that are published through the WTO and other sources. Over the past several years, there has been a rapid increase in the numbers of notices published, and many of them directly impact seed trade of our members. ASTA now monitors the WTO website on a weekly basis, and a small working group of seed company experts and ASTA staff has been formed to help ASTA collect and evaluate information needed for these responses.
Communications

BETTER SEED, BETTER LIFE

During ASTA’s CSS & Seed Expo – which was well-attended by more than 20 members of the trade and mainstream media – ASTA announced the winner of its third annual Better Seed, Better Life student video contest. For the second year in a row, Kevin Falk, Iowa State University, took home the top prize. The contest is a collaboration between ASTA, the National Association of Plant Breeders and the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America.

To help kick off the International Year of Plant Health (IYPH), ASTA has produced a mini-documentary about the role of the U.S. seed industry in ensuring safe, quality seed. The 15-minute video, titled, Seed Quality Management: A Systems Approach, can be found on ASTA’s YouTube channel, and is available with English and Spanish sub-titles for use at international meetings and other events.

Another ASTA-produced video, “Recharging the Landscape,” highlights the seed industry’s role in wildfire restoration and rehabilitation efforts. The video features representatives from a number of ASTA-member environment and conservation seed companies. The video can be found on ASTA’s website and YouTube channel.

PLANT BREEDING INNOVATION

In June 2019, Innovature, a joint initiative of ASTA and BIO, convened a dialogue in Washington, D.C. with grocers, restaurateurs and scientific innovators committed to tackling the issue of food waste and its impact on the environment. Panelists at the “Saving Food, Fighting Food Waste” forum included: Doug Cole, Senior Manager of Marketing and Biotech Affairs at Simplot Plant Sciences; Tim Ma, owner and executive chef of American Son, the flagship restaurant of the Eaton Hotel in Washington, D.C.; Monica McBride, Manager of Food Loss & Waste at World Wildlife Fund; and Danielle Vogel, the founder of Glen’s Garden Market, a D.C.-based sustainability-focused food business. The standing-room-only crowd of attendees represented a broad mix of stakeholders from the agricultural industry, food companies, foreign embassies, lobbying and advocacy groups, news media outlets, NGOs and nonprofits, policymakers, and trade associations.

Innovature, which entered its second year, is a platform to engage influencers in a dialogue about innovation in food and agriculture, including evolving breeding methods like gene editing, and its benefits for our planet, our health, and our food. The effort builds on ASTA’s long-term, ongoing efforts around plant breeding innovation policy, communications and stakeholder outreach at the domestic and international levels. Through the content hub (Innovature.com), social properties, events and other forums, Innovature is engaging a diverse audience of key influencers in a conversation around shared values, with a goal of fully realizing the potential of plant breeding innovation to address society’s most urgent and pressing challenges. The initiative saw strong success from its launch and continues to grow and build momentum. Learn more at www.innovature.com and join the conversation by following @InnovatureNow on social media.
Communications Continued

In March 2020, ASTA, along with the Farm Foundation, American Farm Bureau Federation, and Michigan State University hosted a briefing and panel discussion around their survey on consumer attitudes about gene editing. A recorded webcast and presentations from the forum, held at the National Press Club in Washington, D.C., are available on the Farm Foundation website. Dr. Courtney Weber, a berry researcher at Cornell, participated in the panel discussion to provide a plant breeding perspective, including the important role of innovation in providing solutions to environmental challenges and meeting changing consumer demands.

In 2020, ASTA and CropLife International rolled out the latest video in their plant breeding innovation series. “Breeding for Better Bread” highlights research at Kansas State University to produce wheat with added benefits, including reduced gluten and higher yields. The video, which has been translated into several languages, is available on ASTA’s website and YouTube channel.

SEED TREATMENT STEWARDSHIP

In the spring of 2020, ASTA joined with BeSure! for its second annual national campaign. BeSure! reminds growers and applicators to follow a few simple guidelines to BeSure! they’re using pesticides safely. The campaign is powered by the Growing Matters coalition, in partnership with ASTA, the National Pesticide Safety Education Center, the National Corn Growers Association, the American Soybean Association, CropLife America and the Agricultural Retailers Association. Communications resources are available at GrowingMatters.org/BeSure and on ASTA’s Guide to Seed Treatment Stewardship site at seed-treatment-guide.com/.

ASTA, along with other agriculture organizations, participated in a well-attended Demonstration Day for Federal regulators at a farm in Maryland. Additionally, seed treatment stewardship was one of the key topics discussed by ASTA at the National Farm Broadcasting Association’s (NAFB) Convention in November 2019 in Kansas City. ASTA hosted a booth at the Trade Talk Expo where ASTA Chair Wayne Gale and staff participated in interviews with farm broadcasters from across the U.S. At the conference, ASTA also sponsored and participated in a student panel discussion on careers in agriculture.
**MEMBERSHIP ENGAGEMENT**

ASTA is a purely member driven organization that, through the 2018-2021 Strategic Plan, is charged with a focus on engagement of its members at a higher level. The association is dedicated to increasing the candid feedback from all member organizations to gain new knowledge of company needs and align priorities, activities and volunteer opportunities.

The COVID-19 pandemic, which necessarily became a large focus of ASTA’s communications efforts in the second half of the fiscal year, further highlighted the fragile balance of our global food system and the need for continued innovation in food and agriculture. Members of the media expressed a renewed interest in seed and its link to food security, including global seed movement, phytosanitary issues, and home gardening. ASTA participated in a number of interviews with both mainstream and trade media, and Agri-Pulse published an Op-ed from ASTA President & CEO Andy LaVigne, titled “The Seed Industry is Open for Business,” about the seed industry response and continuity of operations during COVID-19.

In 2020, ASTA’s Seed Ambassador Leadership Team (SALT) grew to over 120 members. The association held full-day training workshops for new team members in conjunction with ASTA’s CSS & Seed Expo 2019 in Chicago and 2020 Vegetable & Flower Conference in Monterey. Throughout the year, SALT members were provided with monthly social media content, and engaged in advocacy-themed continuing education webinars on topics including: hosting virtual tours and events; basic video production for social media; and how to talk about pesticides and seed treatment stewardship.

The quick reply question of the month, now in its second year, has allowed members to provide feedback and input to ASTA on a regular basis and in an informal way. A single question is posed to the membership about different facets of programming within the association. These monthly questions have given ASTA greater insight into the daily workings of members, issues facing the seed industry and ways that ASTA can continue to serve its members. These routine questions are intentionally planned to garner input from members to assist in decision making and program design. Member feedback is crucial to ASTA’s success and this is just one of the many ways members can engage.

**STUDENT MEMBERSHIP**

ASTA is pleased to cultivate the future of the seed industry through its Student Membership. In just its second year, the student membership program recruited 70 members that are interested in entering the seed industry after graduation. Student members range from high school FFA students to PhD candidates with a focus in plant breeding. ASTA’s monthly student newsletter is just one way the association delivers benefits to this new class of members. The newsletter includes industry news and updates, company spotlights, student member spotlights, scholarship programs and internship and full-time career openings. Additionally, students were invited to join ASTA meetings to gain industry knowledge and expand their network.
Intellectual Property

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS (UPOV)

At the request of member states and regional and international industry associations, UPOV agreed to open the Explanatory Notes on Essentially Derived Varieties (EDV) for revision. ASTA formed a project team of interested members to review the explanatory notes and prepare a position paper. The ASTA Board of Directors approved the Position Paper on EDV System Roles, Accountabilities, and Conditions in June 2020. The concepts in the paper will be used by ASTA representatives to provide feedback to key stakeholders during the UPOV revision process.

ASTA continues to promote adoption of the UPOV 91 act by key international trading partners to ensure the success of the global breeding industry and promote innovation.

MOLECULAR MARKERS IN PLANT VARIETY PROTECTION

ASTA’s molecular marker working group published a peer-reviewed journal article in Crop Science entitled “Single nucleotide polymorphisms facilitate Distinctness, Uniformity and Stability (DUS) testing of soybean cultivars for plant variety protection.” The research uses publicly available markers in soybeans to establish methodologies to facilitate DUS testing while maintaining current intellectual property protection levels.

ASTA members shared research updates with the UPOV Biochemical and Molecular Techniques working group and participated in a new working group on molecular markers at ISF.

ACCESS AND BENEFIT SHARING

Access and benefit sharing of genetic resources plays a critical role in breeding programs and supporting innovation. The International Treaty for Plant Genetic Resources for Food and Agriculture was unable to reach an agreement on a Standard Material Transfer Agreement at the 2019 Governing Body Meeting. ASTA representatives participated in all discussions related to these provisions to convey the U.S. industry perspective. Despite the fact that the new agreement was not achieved, the International Treaty continues to help the U.S. seed industry access genetic materials necessary for breeding programs.
ASTA Affiliates & Partners

SEED SCIENCE FOUNDATION

Established in June 2018, the American Seed Research Foundation and the National Council of Commercial Plant Breeders combined efforts to create the Seed Science Foundation (SSF). Created as a 501(c)(3) organization, the foundation has three goals: 1) address seed and plant science challenges; 2) encourage plant breeding education and seed research in support of the ever-changing needs of the global seed industry; and 3) provide insight and recommend solutions that enable the U.S. seed industry to function with global effectiveness. The foundation brings tremendous value to ASTA by providing a proactive and integrated source of plant science expertise for addressing integral issues facing the U.S. seed industry. SSF is also an active facilitator of several student programs within ASTA’s revitalized student connections efforts, encouraging future generations of talent to join the seed industry.

FIRST THE SEED FOUNDATION

The First the Seed Foundation (FTSF) is a not-for-profit organization established by ASTA in 2008 to inform today’s consumers and tomorrow’s workforce about the importance of the seed industry. Its mission is to conduct education, outreach, and communication on the value of crops and food produced from seed.

Key programs include:

- **TOMATOSPHERE™**
  - A partnership with NASA that educates and inspires young students, building their capacity and understanding of scientific inquiry and opening the door to extended space exploration.

- **GROW A SEED**
  - A free career education program developed to help students explore their talents and become successful in the workplace by providing participants with a career handbook including: career opportunities and profiles; checklists; parent handouts; and other resources.

- **PLANTING THE SEED**
  - This curriculum was developed to assist teachers in growing the next generation of seed scientists and environmental innovators by letting students explore how tiny seeds can solve some of the planet’s biggest problems.

7,647 classrooms  
182,472 students

290 classrooms  
9,205 students

260 classrooms  
6,827 students
ASTA HONORS SEED INDUSTRY LEADERS

ASTA presented its annual seed industry leadership awards during the 2020 Policy & Leadership Development Conference held virtually.

Mary Smith and Wayne Parrott Receive ASTA’s Distinguished Service Award

Mary Smith graduated from the University of Arkansas at Fayetteville with a Master of Science in Plant Pathology in 1974 and came to the Arkansas State Plant Board in 1981, serving as a seed analyst, germination supervisor and then head of the seed lab from 1988-1990. From 1990 through September 2019, as Seed Division Director, she served as Seed Control Official for Arkansas and directed the Seed Regulatory Program, where her duties included overseeing and coordinating activities of the Arkansas Seed Certification program and Official State Seed Laboratory. During this time, Mary contributed significantly to the seed industry. She served as President of the Southern Seed Control Officials Association (SSCOA) from 1993 to 1995, then later as their Secretary/Treasurer. She was appointed by the U.S. Secretary of Agriculture as a Member of the Plant Variety Protection Board from 1995-1999. Later, she served as President of the Association of American Seed Control Officials (AASCO) from 2003-2005 and as a contributing author on AASCO’s Handbook on Seed Sampling in 2006. In October 2017, an additional role was added to her work at the Arkansas State Plant Board after the Industrial Hemp Research Pilot Program was passed by the AR legislature, when she was assigned to write regulations for this program, which became effective 8-31-2018.

Wayne Parrott, a professor of crop sciences in the University of Georgia’s College of Agricultural and Environmental Sciences in Athens. Since 2017, he has also been an Elected Fellow of the American Association for the Advancement of Science. He received his B.S. in agronomy from the University of Kentucky, and his M.S. and Ph.D. from the University of Wisconsin-Madison in 1985.

Founder of the Parrott Lab, Dr. Parrott has researched the genetic map of the soybean, with the goal of identifying genes that control its growth. He is also researching the genetic origins of the four-leaf clover, and his lab has come closest to discovering the plant’s genetic roots.

He has been a tireless advocate in efforts to reach the public, elected and regulatory communities to address evolving plant breeding methods. As part of these efforts, he has testified before Congress and served as part of a recent joint National Association of Plant Breeders and the Plant Breeding Coordinating Committee-ASTA Plant Breeding Innovation session for federal regulators in Washington D.C.
ASTA Affiliates & Partners Continued

Tom Moore and Bernice Slutsky Honored with the ASTA Lifetime Honorary Membership Award

As the West Coast Production Manager for HM.Clause, Moore was responsible for domestic and international production of foundation and stock seed, in addition to all commercial small seed production within the U.S. In his 24 years with HM.Clause, his previous assignments included Offshore Production Manager, Quality Assurance Director, and Market Seed Quality Manager.

Moore served on several committees within the American Seed Trade Association. He is Past Chairman of the ASTA Phytosanitary Committee, the ASTA International Executive Committee and the ASTA Emerging Diseases Committee.

In April 2006, Dr. Bernice Slutsky joined the staff of ASTA as Vice President, Domestic and International Policy and quickly moved to target ASTA’s policy programs around the association’s recently updated strategic plan. With her extensive experience in negotiating international trade policy regarding agriculture sciences, Bernice quickly built upon the international program foundation developed by ASTA’s former President and CEO Dick Crowder. She also placed added emphasis on ASTA’s national leadership on domestic policy issues impacting the plant breeding, research, genetics, and plant sciences that is the heart of the American seed industry.

Prior to joining ASTA, Bernice served as Senior Advisor for Biotechnology in USDA’s Office of the Secretary, for Secretaries Ann Veneman and Mike Johanns, coordinating USDA policies and activities in agricultural biotechnology. Before that role, she served as Assistant Vice President, International Regulatory Affairs at the Pharmaceutical Research and Manufacturers (PhRMA) and preceding that as Biotechnology Coordinator of International Trade Policy at the USDA Foreign Agriculture Service. Bernice earned her doctoral degree in biology from the University of Iowa.
Conventions & Meetings

2019 FARM AND LAWN SEED CONFERENCE

ASTA’s 65th Farm and Lawn Seed Conference was once again held in conjunction with the Western Seed Association Conference, which brought more than 700 seed industry representatives to Kansas City, Missouri for networking and business meetings. The ASTA program included an update from Kevin Norton, Associate Chief of the Natural Resources Conservation Service, a report on the future of the sorghum industry by John Duff of National Sorghum Producers, a presentation on hemp seed challenges and opportunities by Frank Curtis of New West Genetics, and ASTA updates on grass seed and state issues. This was the first year the conference was held under the new event management for the Western Seed Association (WSA) and successfully migrated to the new model of ASTA’s focus on management of the ASTA education program, shifting management of exhibits and appointment tables to WSA.

CSS 2019 & SEED EXPO

ASTA’s CSS 2019 & Seed Expo gathered over 2,300 registrants and over 130 exhibitor companies. The general session set a new fourteen-year record for attendance with the blockbuster “Thriving Amongst the Giants” panel discussion, following up on the prior year’s “Majors After the Mergers” session, the previous 10-year record holder. Other session topics included plant breeding innovation, a new and well-attended session on hemp seed, a popular session on biologicals, and others including the return of the global agricultural outlook presentation by economist Dan Basse of AgResource. ASTA expanded its Seed Expo educational tours, based on a successful debut in 2018, and this year offered not only a tour based on the topic of seed treatment, but additionally held an Equipment Innovations tour and a new Ag Tech Innovations Showcase, in response to more new first-time exhibitors than ever before, mainly in the burgeoning ag tech field. A third year data analysis was conducted in order to drive future conference updates and enhancements for 2020.
59TH VEGETABLE & FLOWER SEED CONFERENCE

In 2020, ASTA’s Vegetable & Flower Seed Conference was held in the newly remodeled Monterey Conference Center in Monterey, California. The conference gathered just under 1,000 participants from 37 countries and featured 141 companies participating in the Trading Room. The program featured two general sessions. The first, entitled “The Farmer of the Future,” featured Brett Sciotto of Aimpoint Research, sharing his firm’s recent insights based on data and industry focus group discussions on the changing needs of farmers that lie ahead. The second General Session/Vegetable & Flower Seed Division meeting featured presentations by Congressman Jimmy Panetta, followed by retailer Randy Riley of Kroger and Brian Church of Church Brothers Farms, each providing perspectives and predictions for what lies ahead for the produce industry and the vegetable seed business. A special workshop on communications was offered, entitled “Meeting Consumer Demand through Quality Seed,” and a delegation of students from three California universities attended several ASTA sessions and networking events, as well as providing poster presentations. Conference sessions were well-attended and covered topics including: phytosanitary issues, organic seed, communications, food safety, management skills, emerging diseases, innovation in plant breeding, seed treatment and intellectual property rights.

POLICY & LEADERSHIP DEVELOPMENT CONFERENCE/PLDC VIRTUAL

Proving that 2020 will forever be an historic year in ASTA convention history, the arrival of the coronavirus pandemic in the United States caused ASTA’s planned Policy & Leadership Development Conference (PLDC) in Indianapolis, which was planned as a joint convention with the Association of Official Seed Analysts/Society of Commercial Seed Technologists, to be cancelled due to safety concerns and government mandates preventing the assembly of large gatherings. In its place, ASTA created the new “PLDC Virtual” conference, which began May 19 and continued for eight weeks until its final session on July 16, with one session held per week on average. Topics were quickly changed from the original programming to topics more specific to current impacts from the pandemic on seed businesses, and included Economic Outlook sessions for both field crops and produce, followed by sessions on hemp seed, “Moving Seed in an Uncertain World,” a state legislative review, seed industry relations, the continuation of the previous year’s Women’s Business Networking session and an Innovation and Policy session focusing on the USDA Ag Initiative. For the first time in history, the ASTA Annual Meeting and ASTA Board of Directors meeting were held virtually. The participation in PLDC Virtual, which was offered free to all participants, more than doubled the usual attendance and set a new 17-year record with 546 registrants, also expanding the reach geographically to participants from 15 countries. The “PLDC Virtual” conference site also offered a curated collection of video sessions for early-career seed industry professionals to build their career and leadership skills by viewing this special archive of past PLDC leadership development track sessions as well as other past ASTA programming on career development.
2019-20 Membership Breakdown

MEMBERSHIP BY TYPE:
- Active Members ......................... 433
- Affiliate Members ...................... 55
- Associate Members .................... 205
- Broker-Agent Members ............... 9
- Corresponding International Members .... 27
- Reciprocal Members .................. 30

TOTAL: 759

MEMBERSHIP BY REGION:
- Canada .......................... 38
- Central .......................... 139
- Foreign .......................... 61
- Mexico ........................... 3
- North Central ...................... 180
- Northeast ........................ 39
- Northwest ......................... 65
- South ................................ 53
- Southeast ......................... 56
- West ................................ 125

TOTAL: 759

STUDENTS:
- 70

TOTAL: 759
Financial Position

ASTA’S BUDGET

ASTA’s budget is based on guidance and approval from the Board of Directors according to determined priorities and the ASTA Strategic Plan. ASTA strives to maintain transparency with the membership regarding the association’s budget and financial status. The Board of Directors approves and reviews the financial status quarterly, which enables ASTA to maintain a strong and focused direction. The annual audit was conducted by ASTA’s auditors, Raffa, Inc, in accordance with generally accepted accounting principles, GAAP. The 2018-19 audit confirmed the financial health of the association. ASTA ended its fiscal year with $4,867,498 in net assets. ASTA has calculated in-kind contributions from member companies related to the international activities of the association of $13,805,821. This includes promotion, travel, research and professional services that the audit firm included in the FY 2018-19 audit.

INVESTMENT AND RESERVE POLICY

The Board of Directors has established guidelines for ASTA’s investment and reserve accounts, striving to maintain a balance of one-and-a-half to two times the annual ASTA operating budget. Of that reserve, 10-percent is maintained in an operating reserve and expenditures are subject to approval of the Executive Committee or the Board of Directors. The remaining balance is divided between 20-percent in a mid-term reserve account and 70-percent in a long-term reserve account. Expenditures from those reserves are vetted through the Finance Committee and approved by the Board of Directors. Under this policy, when authorizing expenditures from the long-term reserves, the Board will approve a plan to replenish the amount expended.

OPERATING REVENUE AND SUPPORT

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-kind contributions</td>
<td>$13,805,821</td>
</tr>
<tr>
<td>Membership dues</td>
<td>$4,077,375</td>
</tr>
<tr>
<td>Registration fees</td>
<td>$947,883</td>
</tr>
<tr>
<td>Government grants and contracts</td>
<td>$653,529</td>
</tr>
<tr>
<td>Exhibit fees</td>
<td>$380,960</td>
</tr>
<tr>
<td>Contributions and sponsorships</td>
<td>$354,838</td>
</tr>
<tr>
<td>Administrative service fees</td>
<td>$10,000</td>
</tr>
<tr>
<td>Other income</td>
<td>$201</td>
</tr>
<tr>
<td><strong>Total Operating Revenue and Support</strong></td>
<td><strong>$20,230,607</strong></td>
</tr>
</tbody>
</table>

OPERATING EXPENSES

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Services</td>
<td></td>
</tr>
<tr>
<td>International initiatives</td>
<td>$14,861,621</td>
</tr>
<tr>
<td>Meetings</td>
<td>$1,371,823</td>
</tr>
<tr>
<td>Policy</td>
<td>$1,250,023</td>
</tr>
<tr>
<td>Legislation</td>
<td>$634,158</td>
</tr>
<tr>
<td>Membership</td>
<td>$300,161</td>
</tr>
<tr>
<td>Other</td>
<td>$272,271</td>
</tr>
<tr>
<td><strong>Total Program Services</strong></td>
<td><strong>$18,690,057</strong></td>
</tr>
<tr>
<td>Supporting Service</td>
<td></td>
</tr>
<tr>
<td>General and administrative</td>
<td>$1,957,845</td>
</tr>
<tr>
<td>Change in Net</td>
<td></td>
</tr>
<tr>
<td>Assets from Operations</td>
<td>$(417,295)</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td><strong>$20,647,902</strong></td>
</tr>
</tbody>
</table>

NON-OPERATING ACTIVITIES

<table>
<thead>
<tr>
<th>Activity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment income, net</td>
<td>$339,933</td>
</tr>
<tr>
<td>Branding expenses</td>
<td></td>
</tr>
<tr>
<td>Change in net assets</td>
<td>$(77,362)</td>
</tr>
<tr>
<td>Net assets, beginning of year</td>
<td>$4,944,860</td>
</tr>
<tr>
<td>Net assets, end of year</td>
<td>$4,867,498</td>
</tr>
</tbody>
</table>
ASTA Staff

EXECUTIVE OFFICE
Andrew W. LaVigne
President and CEO
Libby Hogen-Heath
Executive Assistant

DOMESTIC AND INTERNATIONAL POLICY
Bernice Slutsky
Senior Vice President, Innovation
Jane DeMarchi
Vice President, Government and Regulatory Affairs
Ric Dunkle
Senior Director, Seed Health and Trade
Abigail Struxness
Senior Director, International Programs and Policy
Pat Miller
Director, State Government Affairs
Virginia Houston
Director, Government Relations
Mary Scott
Coordinator, Domestic and International Programs

FINANCE & ADMINISTRATION
Ann Jorss
Chief Operating Officer
Barbara Surian
Director, Administrative Services

COMMUNICATIONS
Bethany Shively
Vice President, Strategic Communications
Ellen Zimmerman
Director, Internal Communications and Engagement
Kaitlin Crawford
Manager, Marketing and Communications

MEETINGS & SERVICES
Jennifer Crouse
Senior Director, Meetings & Services