A Statement from the ASTE Presidential Team
Contributed by Tisha Morrell, Valarie Akerson, and Gillian Roehrig

The 2019 Conference in Savannah
It sometimes seems that “the more things change, the more they stay the same.” Such has been the case with social injustice and violence in our school systems and in society in general. Just looking over the past two years and messages from the ASTE Board, in 2016 there was a statement issued about making “sense of sometimes senseless events” and another similar statement in 2017. The past two years, ASTE members have joined in the March for Science to not only promote the need for evidence-based policies, but also to promote science education. When we look at today’s headlines, we still see evidence of prejudice, cultural incompetence, and reliance on opinions with no basis in fact. It may feel that we are just spitting into the wind, but know there is hope—hope that we are not fighting a losing battle but are making progress in all corners of the world. Through education and scientific literacy there is hope.

As science teacher educators, we know the importance of instilling a need for social justice in our colleagues and our students. We are addressing the need for cultural competence in our students. Many (if not all) teacher performance portfolios now require evidence that teacher candidates are reaching ALL students in their care. Both Australia and Canada have constitutionally recognized indigenous/aboriginal populations. New Zealand offers its national curriculum in the Maori language. The Me Too movement has raised the international consciousness of sexual harassment. While some U.S. states are struggling with the issues of schools and transgender bathrooms, there is a movement worldwide for gender neutral or unisex bathrooms in schools and in public locations. Programs exist to help first generation college students be successful by offering mentoring and assistantships. STEM programs exclusively for girls, and after school STEM clubs for all students, are popping up to get children interested in and feeling confident in practicing STEM. These may all seem like baby steps—but the problems we face in science education (and society) are huge. We ARE making progress and making a difference. We must not give up hope, and must continue to offer strength through education and aid in developing scientific literacy for all.

Yes, prejudice is still deeply rooted in societies. Just look at issues around refugees and immigration. Look at percentages for incarceration and violence. But we need to keep believing that if we continue to try to improve things, enough incremental changes will eventually reach the tipping point. We need to continue to effectuate change in our daily lives in our everyday dealings with people. We CAN cause a ripple effect. As Gandhi said, “If we could change ourselves, the tendencies in the world would also change.” The ripples have started. Let’s keep them coming.

Tisha Morrell, ASTE President; Valarie Akerson, President Elect; Gillian Roehrig, Past President
Executive Director’s Report
Contributed by Bob Hollon

It is August – time to get ready for another ASTE organization year, and time to get ready for Fall regional meetings and the 2019 ASTE International Conference in Savannah, Georgia. Regional meetings are posted on the ASTE web page. The International Conference will convene January 3-5, 2019 at the Hyatt Regency overlooking the river.

Be a good ASTE citizen and VOTE! Get Involved with Committees and Activities

Please read and respond to requests to vote, renew membership, and provide the board with feedback about issues facing the organization. Of significance is a motion to alter the ASTE Bylaws to add a graduate student to the Board of Directors as a voting member. Now is also the time to consider serving in a leadership role within ASTE by volunteering for a committee, helping with the annual conference, or working to introduce colleagues to the organization.

Membership

Over the past five years, ASTE membership has generally increased from about 660 people to over 700. I am happy to report that 2018 membership met our projections with 702 members as of August 15, 2018. We may still get a few members later this year.

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>2017 Number</th>
<th>2018 Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>International</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Retired</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>Student</td>
<td>136</td>
<td>138</td>
</tr>
<tr>
<td>U.S.</td>
<td>507</td>
<td>511</td>
</tr>
<tr>
<td>Total</td>
<td>702</td>
<td>702</td>
</tr>
</tbody>
</table>

Please remember that ASTE membership operates on a calendar year. Thus, you must be a 2018 member to vote in the upcoming fall elections. You must have a 2019 membership (available starting in October) to receive discounted rates for the 2019 annual conference.

The Cost of Doing Business

ASTE members receive many benefits via their full memberships. A detailed list can be found at https://theaste.org/join-aste/. Generally, all membership categories include full access to the
Journal of Science Teacher Education, Innovations in Science Teacher Education, the ASTE Newsletter, access to all online resources, discounts on ASTE publications, and reduced rates for the annual conference. Like it or not, though, almost everything costs more today than it did a few years ago. Our last membership rate increase occurred in 2015. Since that time, we’ve added a new journal, strengthened our international visibility, expanded our social media presence and revamped our online processes for managing membership, conference activities, and journal production. We also experienced cost increases for insurance rates, travel, administrative stipends, publication management, and website maintenance. The ASTE Board of Directors Executive Committee reviewed operation expenses at the Summer 2018 meeting and reluctantly approved a rate increase beginning in 2019 to help offset the increased costs for basic ASTE operations. The chart below shows the rates for 2018 and 2019. New ASTE members will receive a $10 discount from the regular rates for one year.

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>$100</td>
<td>$125*</td>
</tr>
<tr>
<td>Student</td>
<td>$60</td>
<td>$85*</td>
</tr>
<tr>
<td>Retired</td>
<td>$35</td>
<td>$60*</td>
</tr>
</tbody>
</table>

*New members receive a $10 discount for one year

Donations to ASTE

ASTE members continue to amaze me with their commitment and generosity. In response to members’ requests to support the organization beyond their membership fees, we set up a donations account to track contributions and ensure that donor’s requests are honored. The fund increased in value during 2017 and 2018 with contributions primarily directed to strengthen support for our graduate student members. Contributions may be public or anonymous, and directed to specific activities – all at the discretion of the donor. If you would like to set up a monthly contribution rather than a lump sum donation, we can set up an automatic transfer from your bank account or PayPal account to the ASTE donation account.

ASTE Finances

Current and future ASTE operating budgets now require about $65,000 per year to meet our contractual commitments for administrative positions, editors, and miscellaneous expenses such as web services, programming, and financial reporting. In addition, our contractual obligations to conference hotels range from $80,000 - $100,000 in any single year.
Our current assets total $363,898 with $252,963 in our Money Market account, $3,505 in the Legacy account, and $107,358 currently in the checking account. Much of the checking account balance is earmarked for current fiscal year expenses. We are sustaining three years’ operating and contractual obligation reserves in the Money Market account. The ASTE Board is currently supporting construction of a proprietary conference app and will move from there to a major revision of the ASTE websites. These efforts will require one-time expenditures of about $25,000.

**Looking Ahead**

2019 membership and conference registration for Savannah, GA will open around October 5, 2018. Details will be available on the ASTE website. The conference team is working hard to build an outstanding program with a full range of activities and field trips. **You must be a 2019 member to receive the discounted rates.**

Conference rates for 2019 ASTE members will not increase this year. Early bird discounted rates are $250 for regular members and $120 for students. It is a significant reduction from the onsite rates of $325/regular and $185/student and non-member rates of $460. Non-member and guest conference registration rate increased by $25 to reflect the membership rate increases. So, get an early start on your year by renewing your ASTE membership and registering for the conference.
Get ready for the 2019 ASTE Conference in Savannah, Georgia! At the conference, you will have opportunities to network with ASTE members, present your cutting edge work, and learn about exciting research and pedagogical strategies from others. The theme of the 2019 conference is “Building Bridges and a Presence within a Climate of Change in Science Teacher Education.” In adhering to this theme, the planning team has been working diligently to create a conference program that represents the diverse interests of the ASTE membership, while addressing critical and systemic issues that impact the work of science teacher educators.

Plans for the 2019 conference are still emerging, but we do have two exciting keynote events. Eric Banilower, Vice President of Horizon Research, Inc. will give one of the exciting keynote presentations. He will share the first release of the data from the 2018 Survey of Mathematics and Science Teachers in the United States. For many of us in science teacher education, this survey has provided essential information about instructional and learning needs of preservice and in-service teachers.
Our other keynote presentation will be a conversation with leaders who are working to challenge the issues that science teacher educators are encountering in their work. One of the presenters will be Brian Williams, director of the Alonzo A. Crim Center for Urban Educational Excellence (CUEE). CUEE serves the southeast region of the nation as an interdisciplinary outreach, research, and educational support and development hub that provides equitable learning experiences for all groups of children. Brian Williams, along with the other presenters, will engage in a dialogue that is important to the members of ASTE. We will be reaching out to the ASTE membership to help shape this event.

Next year also marks the 30th anniversary of The Journal of Science Teacher Education (JSTE), ASTE’s flagship journal. JSTE disseminates high quality research and position papers specifically focused on preservice and inservice science teacher education. The publications committee will be working with the planning committee to determine how to best highlight the work that has been done over the last 30 years.

Say it with us, “I've got Georgia on my mind!” The conference will have other special guests, presentations, and unique opportunities to explore the charm of Savannah.

We look forward to seeing you in Savannah!

The 2019 ASTE Conference Co-chairs – Katie Brkich, Nate Carnes, Natalie King, Julie Luft, & Renée Schwartz
The ASTE PD Committee wishes to thank the members who submitted a record 34 workshop proposals for the upcoming conference in Savannah. The high quality of the proposals made our selection process quite difficult given our limited space in the program. We are pleased to announce the following PD Workshops to be held at the 2019 annual meeting. All workshops will be embedded in the conference program, and are either 1 hour or 2 hours in length. Preregistration is not required, and attendance will be limited to space available.

**Thursday, January 3**

**Exploring the Potential of Simulated Classrooms to Support Practice-Based Learning Opportunities for Elementary Science Teachers**

*Jamie N. Mikeska (ETS), Pamela S. Lotter-Perde (ETS)*

Conference attendees will consider how an online simulated classroom environment can be used to support elementary science teachers as they learn how to engage in one ambitious teaching practice: facilitating small group discussions focused on scientific argumentation.

**Concurrent Session 1**

**Graduate Student Workshop: Preparing for the Workforce**

*Jeanna Wieselmann (University of Minnesota), Randy Bell (Oregon State University), Kent Crippen (University of Florida), Julie Luft (University of Georgia), William McComas (University of Arkansas), Gillian Roehrig (University of Minnesota), Kathy Trundle (Utah State University)*

In this session, graduate students will participate in roundtable discussions related to navigating the transition from graduate school to the workforce. Participants will select from a variety of roundtable topics, ranging from developing an effective CV to preparing for the campus visit. Established faculty members will lead the roundtables and offer their advice to participating graduate students.

**Concurrent Session 2**

**Successful Grant Writing**

*Mary M. Atwater (University of Georgia), Melody Russell (Auburn University), Malcolm B. Butler (University of Central Florida), Rhea Miles (East Carolina State University)*

Doctoral students near the completion of their studies, assistant/associate professors, and informal science educators at museums, nature centers, or aquariums will desire to participate in this two-hour beginning and intermediate level grant-writing workshop. The workshop will focus on writing and submitting proposals to NSF, DOE, and NIH.

**Concurrent Session 3-4**
Friday, January 4

Addressing Language/Literacy Development for English Learners in Secondary Science Method Courses
Edward G. Lyon (Sonoma State University), Joyce Hill (University of California, Santa Cruz), Suzanne Garcia (Tam High School)
Participants will engage with tools and instructional tasks to modify secondary science method courses in support of preparing pre-service teachers to teach science to ELLs and overcome likely challenges faced. The workshop will be guided by the SSTELLA Framework that integrates NGSS-aligned science learning with language/literacy development.

Concurrent Session 5-6

Be an Early Career STAR: Balancing Service, Teaching, and Research
Alec M. Bodzin (Lehigh University), Deborah L. Hanuscin (Western Washington University), Ronald S. Hermann (Towson University), M. Gail Jones (NC State University), Felicia M. Mensah (Teachers College, Columbia University), Erin Peters-Burton (George Mason University), Rose M. Pringle (University of Florida), Rebecca M. Schneider (University of Toledo), Carla J. Johnson (Purdue University)
Early career science teacher educators – the future STARS of our field – are encouraged to join this workshop to learn practical advice and tips for success from ASTE Outstanding Science Teacher Educators.

Concurrent Session 7

Visibility in STEM: Use of Archive Data to Explore the Nature of Science and the Scientific Concepts in Charles Drew’s Scientific Contributions
Catherine Quinlan (Howard University, School of Education)
The absence of the scientific contributions of African American scientists, in any meaningful way, that connects with the scientific concepts being studied, underplays the significance and relevance of the contributions of people of African origins to science. This workshop explores the science in Charles Drew’s work – the “Father of Blood Bank” – as it relates to the Next Generation Science Standards.

Concurrent Session 8-9
Saturday, January 5

Understandings of Scientific Inquiry: Learning to Score and Administer Valid and Reliable Instruments (Views about Scientific Inquiry and Young Children Views about Science)
Judith S. Lederman (Illinois Institute of Technology), Selena L. Bartels (Valparaiso University), Norman G. Lederman (Illinois Institute of Technology), Dawnee LePrette (Illinois Institute of Technology)
During this workshop, participants will learn how to deliver and validly score instruments (VASI and YCVS) that assess students' understandings of scientific inquiry. This interactive workshop will provide opportunities to learn about previous studies about SI from around the world and to collaborate with colleagues to develop further research.

Concurrent Session 10-11

Using Examples of Student Thinking to Improve Teachers’ Conceptions of Nature of Science
Jennifer Parrish (University of Northern Colorado), Bridget Mulvey (Kent State University), Joshua W. Reid (Middle Tennessee State University)
This workshop will engage teacher educators in using the NOS Example Strategy, a new way to facilitate explicit, reflective NOS instruction. Participants will gain first-hand experience using the strategy and discussions will focus on how to use the strategy in methods courses and professional development settings.

Concurrent Session 12
We are pleased to announce that Volume 3, Issue 3 of the *Innovations in Science Teacher Education* journal is now available at:

http://innovations.theaste.org/publication/volume-3-18/issue-3-18/

This issue features an article that describes a professional development program for supporting teacher design of socio-scientific issue units. This issue also contains an article that describes a blended PD model for teachers to learn, implement, and reflect on NGSS practices. This issue further has an article that describes the use of literacy strategies to enhance understanding of NOS.

We are also extremely thankful for our dedicated Editorial Review Board members who always provide insightful comments and suggestions to authors.

Please help us to spread the news about the *Innovations* journal by sharing the URL (http://innovations.theaste.org/) with your colleagues who may not be ASTE members!

Please join our Facebook Group at https://www.facebook.com/ISTEjournal/ so you can receive announcements regarding the *Innovations* journal.

If you have any questions regarding the *Innovations* journal, please contact the editors: Rommel Miranda (Rmiranda@towson.edu) or Ron Hermann (Rhermann@towson.edu).
Volunteer for a Committee!
Contributed by Valarie Akerson

Are you interested in serving ASTE in a leadership capacity? One way to accomplish that goal is to serve on an ASTE committee. It is also a great way to get to know how the organization works, and get to know others who are involved in the organization!

If you are interested in becoming a committee member, please complete the form at the following link: https://theaste.org/members/volunteer-for-an-aste-committee/

You must be a current ASTE member to serve on any committee. The operating committees and a number of committee members are listed below. Further details can be found in the ASTE Standard Operating Procedures (SOP) available in the member section on the ASTE website https://theaste.org/about/committees/. If you have questions, please contact Valarie Akerson, ASTE President-Elect, at vakerson@indiana.edu. Please note that the Elections Committee is not included since vacancies on that committee are filled through elections each fall.

<table>
<thead>
<tr>
<th>Committee</th>
<th>Purpose/charges</th>
<th>Composition</th>
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| Awards       | Recommend policy to the Board of Directors related to Association awards and administer the awards program. 
- Advertise the awards. 
- Collect and evaluate nomination materials. 
- Recommend awardees to the Board of Directors for confirmation. | Co-Chairs: Board Members  
6 Members-at-large  
Graduate Student Member  
Equity Committee Member (ex officio, non-voting) |
| Communications | Ensure mechanisms are in place for yearlong communication with ASTE members and the public. Specific responsibilities include:  
- Creation of a social media toolbox (e.g., webinar mechanisms, Facebook page, etc.)  
- Writing an ASTE policy on social media  
- Development of branding and promotional materials  
- Overseeing the ASTE newsletter  
- Building a discourse community on science teacher education | Chair: Board Member  
3 Members-at-large  
1 Newsletter Editor  
Graduate Student Member  
Equity Committee Member (ex officio, non-voting)  
Co-newsletter Editor (when relevant) (ex officio, non-voting) |
| Conference Planning | Develops and implements all components of the annual conference. The *Conference Chairs* plan and guide the overall development of the event, coordinate local activities, work with the communications committee to promote conference activities, and work with the ASTE Board and Executive Director to raise funds and implement the conference budget. They ensure that communications with all committee members occur as needed.

The *Conference Program Coordinator* manages the process for building the daily breakout session calendar, including identifying and communicating with thread coordinators, solicitation, organization, and review of proposals, making final acceptance decisions, constructing the schedule of events, and producing app output and a printable program. The coordinator works closely with the ASTE President, Executive Director, Director of Electronic Service, and committee chairs to ensure that meetings, workshops, offsite events and field trips are included in the daily calendar. |
|---|---|
| Chair: Chair of Professional Development Committee  
Current Conference Chairs  
Conference Program Coordinator  
Executive Director  
Director of Electronic Services  
Graduate Student Member  
Future Conference Chairs (ex officio, non-voting)  
Equity Committee Member (ex officio, non-voting) |
| Equity | Ensure that equity issues (i.e., representation, access, and power) are addressed throughout the Association.  
- Serve as resource for equity issues  
- One member serves as an ex-officio, non-voting member on each operating committee and the elections committee  
- Review and recommend policy and procedures to the Board of Directors  
- Submit recommendations for committee appointments  
- Oversee access for people with disabilities at the annual conference |
| Chair: Board Member  
9 Members-at-large  
Graduate Student Member  
Chair of the Inclusive Science Education Forum (ex officio, non-voting) |
| Membership & Participation | Recruit and retain members in the Association.  
• Market the Association to potential members (international, underrepresented populations) liaison with other associations, recruit potential members.  
• Provide new member services (e.g., coordinate a meet the mentor session and program at annual conference).  
• Encourage active participation of members through mentoring.  
• Access membership records to determine representation of groups and to assist in retention.  
• In collaboration with the Professional Development and Equity Committees, every three years oversee the development and administration of an ASTE membership survey regarding professional development, equity issues, and other matters important to the organization. | Chair: Board Member  
Executive Director (ex officio)  
6 Members-at-large  
Graduate Student Member  
Equity Committee Member (ex officio, non-voting) |
| Oversight | Provides oversight for a variety of aspects of the current and future Association.  
• Study and provide recommendations related to:  
  • Association history, including maintaining an archive  
  • Organizational health, including finance, and future needs and directions | Chair: Immediate Past President  
2 Preceding Past Presidents  
3 Members-at-large  
Executive Director  
Graduate Student Member  
Equity Committee Member (ex officio, non-voting) |
| Professional Development | Organize and coordinate professional development opportunities across the Association.  
• In conjunction with the Equity Committee and the Membership and Participation Committee, oversee the administration of the ASTE Grand Combined Member Survey via the ASTE web page every three years. In addition, the Committee shall analyze data | Chair and Co-Chair: Board Member  
12 Members-at-large  
Graduate Student Member  
Equity Committee Member (ex officio, non-voting) |
from the Survey in order to best serve the professional development needs of ASTE members;

- Coordinate and implement the workshops at the annual conference;
- Facilitate opportunities for Professional Development Institutes for Science Teacher Educators;
- Work with other ASTE committees and forums

**Publications**

Recommend policy and advise the Board relative to publication activities sponsored by the Association.

Current publications include:

- Journal of Science Teacher Education (JSTE)
- Innovations in Science Teacher Education
- Science Education Section in Contemporary Issues in Technology and Teacher Education (CITE)
- Edited Books, Volume Series, Monographs/Books, and Handbooks (PUBS)
- ASTE Conference Proceedings

**Chair and Co-Chair:** Board Member

- 6 Members-at-large
- Graduate Student Member
- Equity Committee Member (ex officio, non-voting)
- JSTE Editor(s) (non-voting)
- ISTE Editor(s) (non-voting)
- CITE Section Editor (non-voting)
ASTE Graduate Student Forum
Contributed by Jeanna Wieselmann, Shana Lee, and Preethi Titu

Three Minute Thesis® Competition

The ASTE Graduate Student Forum is excited to announce the second annual ASTE Three Minute Thesis® competition to take place at the 2019 International Conference in Savannah! 3MT® competitors must effectively explain their dissertation research in only three minutes using a single, static slide. This is a great opportunity to learn about the wide range of research being conducted by ASTE graduate student members, and we are seeking both competitors and judges for this event.

Competitors: Ph.D. and Ed.D. candidates who will be defending their dissertations between January 6, 2019, and January 4, 2020, are eligible to participate in the 2019 ASTE 3MT® competition. Click here for more information about competing and to register.

Judges: ASTE members who have completed a terminal degree are eligible to serve as judges. Click here for more information about judging and to register.

3MT® registration closes on October 1 so we can avoid scheduling conflicts with your other ASTE commitments. The competition will be limited to the first 10 submissions.

Graduate Student Recognition

Have you, or a graduate student you mentor, reached a significant milestone this year? We want to recognize the important work being done by ASTE’s graduate student members. Being accepted to present at a conference for the first time, passing preliminary exams, publishing, having a successful defense – we want to hear it all! Share these graduate student achievements for inclusion in future newsletters using this form.

Jeanna Wieselmann – President, Graduate Student Forum (jeanna@umn.edu)
Shana Lee – President-Elect, Graduate Student Forum (slee@bagley.msstate.edu)
Preethi Titu – Vice President, Graduate Student Forum (titux002@umn.edu)

Make sure to like the ASTE Graduate Student Forum Facebook Page and follow us on Twitter (@ASTE_GradForum).
Remember to Vote!

At the May 2018 ASTE Board of Directors meeting, members considered a proposal to add a Graduate Student Director-at-Large to the Board as a voting member with a two-year term of office elected by the ASTE membership. After review, the proposal was moved and seconded for approval. Following the required 30-day discussion period, the Board approved the motion without opposition.

The main motion presented to ASTE members is: Add a Graduate Student Director-at-Large to the Board as a voting member with a two-year term of office elected by the ASTE membership by changing the ASTE Bylaws as listed below.

The proposed action requires changes in several sections of the ASTE bylaws. Use the voting link below for a description of the proposed changes to the ASTE Bylaws.

The proposed action is presented to the ASTE membership for comments and approval. Comments may be submitted to the ASTE Board of Directors by emailing the ASTE President at Morrell@up.edu, emailing any of the ASTE Board Members (go to https://theaste.org/about/ and scroll down for emails of all Board members), or by posting to the ASTE Facebook page.

Vote online at: https://theaste.org/about/aste-by-laws-change/.

The voting window opened on July 17 and will remain open for 60 days from that date. You must be a 2018 member to vote. The ASTE Bylaws require support by two-thirds of those voting for the motion to be approved.
Conference Theme

Culture, Diversity, and Equity in STEM Education

The 2018 NE-ASTE program calls for us to reflect upon the importance of culture, diversity, and equity in STEM education. As educators, we recognize that students bring their own prior experiences and cultural capital to bear in our nation’s classrooms every day. This diversity fills classrooms with stories that are valued in their home lives, but, at times, are overlooked in schools. Teachers and researchers alike are called upon to share research and practices that attempt to break the barriers of inequity in STEM education so that together we are part of the solution.

For more information, please visit the NE-ASTE Conference website or email us at neaste4@gmail.com
Newsletter Information

Published four times a year by the Association for Science Teacher Education.

Issue Items due by:

Summer Aug. 15
Autumn Oct. 15
Winter Feb. 15
Spring May 15

All members are invited to submit items.

Editors: Ian Binns and Mark Bloom
Email: ian.binns@uncc.edu or markb@dbu.edu

Newsletter Sleuth Challenge: Use the clue below to locate the ‘easter egg’ to become a Newsletter Sleuth! Remember to click on it.

Clue: I sometimes have nightmares of no longer attending ASTE, but “still in peaceful dreams I see the road leads back to you!”