S.U.R.G.E!
4-H Volunteers Making Connections Matter

Definitions
Surge: A sudden powerful forward movement by a natural force.
Electricity: a state or feeling of thrilling excitement.
Steam: The vapor into which water is converted when heated, forming a white mist of minute water droplets in the air.
Why the definitions? Because of the symbolism and meaning!
The State Volunteer Board wants to strengthen your confidence in working with youth in the areas of Science, Technology, Engineering, Art and Math, most commonly referred to as STEAM. To be competitive in a global economy, science is important and 4-H can contribute to next generation of scientists.
ALL 4-H projects are science-based, and we want to help you make the connection. Just like water converts to STEAM, we want to help you convert project work into tiny droplets of science.
Our intent is that this conference will be the electrical SURGE which provides a sudden and powerful forward movement in feeling the thrill and excitement of STEAM in project work.
4-H is about increasing knowledge and developing life skills such as “critical thinking.”
Through project groups, clubs, and project work, volunteers and parents assist 4-H’ers in discovering meaning and building connections with past learning. We hope to increase your understanding of “For what is the Head Trained? To Think, to Plan, to Reason.”
Angela Hudson, State Volunteer Board President

2019 Tentative Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Registration, Refreshments</td>
</tr>
<tr>
<td>8:45—10:00 am</td>
<td>Opening Assembly and Super Seminar “Finding the S.T.E.A.M. in ANY 4-H Project” - Room 313</td>
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<tr>
<td>10:00 am</td>
<td>Break-Refreshments</td>
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<tr>
<td>10:15 am - 11:15 am</td>
<td>Workshop Session 2—1 hour</td>
</tr>
<tr>
<td>10:30 am</td>
<td>Honoree Reception, Photos &amp; Rehearsal—Alumni Center</td>
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<tr>
<td>11:30 am - 1:30 pm</td>
<td>Awards Luncheon, OSU Alumni Center Heads or Tails Live Fundraiser</td>
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<tr>
<td>1:45 pm - 2:45 pm</td>
<td>Workshop Session 3—1 hour</td>
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<tr>
<td>1:45 pm - 4:00 pm</td>
<td>Super Session 3 &amp; 4—2 hours</td>
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<tr>
<td>2:45 pm</td>
<td>Break-Refreshments</td>
</tr>
<tr>
<td>3:00 pm - 4:00 pm</td>
<td>Workshop Session 4 - 1 hour</td>
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<tr>
<td>4:15 pm - 4:45 pm</td>
<td>Closing Assembly with door prizes - Room 313 Catalyst for Change Introduction and Presentation</td>
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</tbody>
</table>
The 8 Essential Elements of PYD

<table>
<thead>
<tr>
<th>Positive Youth Development</th>
<th>Youth who experience opportunities to be independent and self-disciplined individuals, as well as capable leaders.</th>
<th>meaningful accomplishments where youth develop skills and confidence. Youth with productive opportunities to experience mastery, tend to become problem-solvers who are motivated and achievement-oriented.</th>
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</thead>
<tbody>
<tr>
<td>All Youth Need to BELONG – Creating environments where members are provided opportunities for relationships and to know they are cared about by others. Youth who experience belonging, tend to be trusting and friendly people.</td>
<td>All Youth Need to Practice Helping Others Through GENEROSITY – Creating opportunities to develop individual moral strength, learning to put the needs of others first and experience being needed.</td>
<td>All Youth Need to Experience MASTERY – Creating opportunities for</td>
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<tr>
<td>All Youth Need to Experience INDEPENDENCE – Creating opportunities to be able to influence people and events and face consequences.</td>
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</table>

State Volunteer Board Members

The State Volunteer Board plans and conducts the state and district PVC and serves the state 4-H program in an advisory capacity. Members are elected at the district level, typically at the district volunteer conference. Position descriptions and applications may be downloaded at [http://4h.okstate.edu/leadership/state-volunteer-board](http://4h.okstate.edu/leadership/state-volunteer-board).

<table>
<thead>
<tr>
<th>West District</th>
<th>Southeast District</th>
<th>Northeast District</th>
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</thead>
<tbody>
<tr>
<td>Shelly Messall</td>
<td>Dee Allen</td>
<td>Stacie Grossardt</td>
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<tr>
<td>Missy Quintero</td>
<td>Calista Stephens</td>
<td>Barbara Pemberton</td>
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<tr>
<td>Glyndee Edwards</td>
<td>Lily Stubbs</td>
<td>Vacancy</td>
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<tr>
<td>Andrea Claborn</td>
<td>Angela Hudson</td>
<td>Vacancy</td>
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</tbody>
</table>

**Board Officers**

- Angela Hudson, President
- Dee Allen, President-Elect
- Stacie Grossardt, Treasurer
- Andrea Claborn, Secretary
Workshops

8:45–10:00 am  **Opening Assembly**—Room 313

**Super Seminar Workshop Session 1**

“Finding the STEAM in any 4-H Project”— Technology is part of our human evolution and each of us is blessed with the most powerful piece of computing equipment on the planet - the human brain. We will simplify S.T.E.A.M. while making a connection to the natural and/or social sciences linked to ANY 4-H project area. This session is a FUN way to connect STEAM and familiar positive youth development models using the simplest of “things” and activities. Parents and volunteers will make the connection as easy as 1,2,3.

10:00 am  **Break**

10:15–11:15 am  **Workshop Session 2**

Click 2 Science: an easy way to incorporate STEAM—Have you ever wanted to incorporate STEAM into your programming but didn’t know where to start? This workshop is designed for those who want to easily incorporate STEAM, use technology, and have fun while doing it.

Firing all Cylinders with STEAM—Want to start a Mechanical Science project club/group? Murray County did! Youth and parents are getting dirty and having fun learning and applying science, engineering and technology using all kinds of “combustion engines!” Join us to learn more.

Full STEAM ahead with 4-H Design and Construction—The 4-H Design and Construction Project is all about Science, Technology, Engineering, Art, and Math. The areas of Apparel, Interior, and Hobbies & Textiles require Designers who function as Architects, the Pattern Makers who Engineers products and Tailors who are the Builder. Join us as we share examples of Design & Construction projects, using STEAM as our framework to develop positive youth development and life skills.

STEAM and Music—Begin to discover the connections between Science, Technology, Engineering, Art and Math IN Music. Join us as we add a "measure" of STEAM to our music and performing arts we explore the science of sound, engineering of instruments, math of musical notes, artistic pleasure to the senses, and more.
**Geocaching, The World's Largest Treasure Hunt**—Geocaching, an outdoor recreational activity, ties technology to the social sciences. Using a Global Positioning System (GPS) receiver/mobile device navigate a relaxing and fun game of hide and seek. The prize is containers, called "geocaches" or "caches", at specific locations marked by coordinates all over the world.

10:30 am **Honoree Reception**—Photos and Rehearsal at Alumni Center (invitation only)

11:30 am **Awards Luncheon**—OSU Alumni Center

1:45–2:45 pm **Workshop Session 3**

**The Science and Art of Civic Engagement (Citizenship)**—Civic Engagement has science and art? Sure! It is all about the social science or study of relationships among individuals and its people. Youth learn about family, heritage and cultures through stories, dress, food and the arts. In the process, youth explore the social science fields of anthropology, communication, economics, history, law, language, political science, psychology, public health, and sociology.

**Create a SPRK for Learning with Sphero SPRK+**—Sphero SPRK+ (robotics/coding) - Sphero’s are designed to inspire curiosity, creativity, and invention through connected play and coding. SPRK+ is far more than just a robot. Equipped with Bluetooth SMART and a scratch-resistant, durable shell and a textured cover to take learning and play to a new level. SPRK+ will foster a love of robotics, coding and STEAM principles all through play.

**Social Justices Sewing Academy - Blending Science and Art**—This youth education program bridges artistic expression and social science. Through a series of hands-on workshops in schools, libraries, clubs, or community centers SJSA empowers youth to use textile art as a vehicle for personal transformation, community cohesion and social change.

**Maker's: Wind Turbine Design Challenge**—Learn how to facilitate a Maker's Engineering Workshop. Participants will engage in a Wind Turbine Design Challenge and discuss the implications for using this Maker's framework to guide other STEAM challenges.
1:45-4:00 pm

**Super Session 3 & 4—2 hours**

**SCRUB: Science Creates Real Understanding of Biosecurity**—SCRUB (Science Creates Real Understanding of Biosecurity) kits are resources which provide hands-on activities which support biosecurity education for youth. Volunteers will experience hands-on activities that illustrates direct and indirect methods of disease transmission. Excellent resources for the club, project group, school, community youth groups.

**The Science Of Bread Making 101**—Bread, in one form or another, has been one of the principal forms of food for man from earliest times. The trade of baker, is one of the oldest crafts in the world. You will learn: STEAM principles related to bread baking, the difference between quick and yeast breads, and about the opportunities available in the bread project—competition to civic engagement.

**NASA STEM based activities for 4-H Clubs**—STEM based activities aimed at exciting club members about NASA and space exploration. Rockets, Lunar Landers, crater formation, design process and critical thinking activities help students understand what goes into efforts to send humans to Mars.

**Apron STEAM — Is the design practical, fashionable or sentimental?**—Aprons serve many functions - decoration, hygiene, uniform, or as protection. Kids can learn about STEAM through sewing projects like a creative, stylish up-cycled apron made from a man’s dress shirt. This hands-on workshop will provide you with shirt, supplies and instructions to make your own apron and take the skills and information back to your club and county 4-H members. Cost $5

2:45 pm

**Break**

3:00—4:00 pm

**Workshop Session 4**

**A Guide to Helping the Undead (Zombie Apocalypse Training Guide)**—Want to survive the zombie apocalypse? Receive the all-inclusive guide for outliving the walking dead! Participants will be introduced to and participate in a new Bio-fuel curriculum. This special twist captures the attention of youth and peaks their interest in STEM. Lessons can stand alone, be incorporated into a series of day-camps, or taught over time at 4-H Project/Club meetings.
Barn Quilts—Expressive Arts and Woodworking projects provide youth an opportunity to explore the social Sciences (history and culture) of barn quilts, the Technology behind the design and use of hand and power tools, Engineering skills necessary to build and hang products, Art - color and design, and the practical application of Math skills when applying geometry.

Shopaholic’s: Science and Math Savvy!—Family and Consumer Sciences is a field focused on the science and the art of living and working well in our complex world. The 4-H Consumer Education project applies to all youth and project areas. Through project work, project groups and club meetings youth can learn and establish good social and behavior money practices. This project has resources galore and opportunities for teens to partner with adults in teaching lessons.

To Infinity and Beyond with STEAM—Being an astronaut and taking a journey takes teamwork, resiliency, a strong awareness of self and others, and perseverance – skills that also are necessary to succeed in life. NASA and 4-H have teamed to help students develop these life skills. Expeditionary Skills for Life is a fresh and fun approach for preparing youth and adult leadership teams. A series of activities, used by astronaut crews, have been designed to take a group through various educational “expeditions” which teach skills connected to every aspect of life. Propel your team’s leadership skills out of this world with STEAM!

4-H Project Work: The Science and Art of Story Telling—The English language is both an art and a science. Through 4-H project work the life skills of Planning/Organizing, Communication, and Keeping Records are all founded in science. Youth are participating in Behavioral Sciences as they plan, Communication Sciences as they share and process, and the Art of writing as they effectively tell their

Closing Assembly with door prizes in Room 313

NEW—Introducing “Catalyst for Change” and presentation, State 4-H Ambassadors
Conference Shirt

T-shirt—$15.

Shirt color—Black

Must be ordered and paid for on or before May 24th.

NO orders after May 24th.

No shirts sold on site/at the conference.

Make payment to: “State 4-H Foundation.”

Conference Location

Oklahoma State University Campus, Stillwater, OK

- All workshops will be in the Classroom Building just North of the Student Union.

- The Luncheon will be in the Conoco-Phillips Alumni Center across the street.

- Link to Campus Map [https://parking.okstate.edu/parking-map](https://parking.okstate.edu/parking-map)

Volunteer Certification

- To ensure a safe environment for youth involved in OCES 4-H Youth Development programs.

- To provide volunteers with training which supports positive youth development, the 4-H mission and strengthens liability coverage for volunteers under the State of Oklahoma Governmental Tort Claims Act.

- To maintain certification: participate in four (4) continuing education opportunities per year, Working with Minors and Title VII & IX training. A minimum of two trainings must be at the county level.
New—Heads & Tails Fundraiser

The Silent Auction, which raises funds to off-set expenses for the State Volunteer Board is being replaced with a fun game of Heads or Tails.

For a $5 donation you can participate in one game of “Heads and Tails.” Each district is donating a gift basket filled with great items.

This is how it works—Those playing stand and are asked to choose either “heads” (shown by putting hands on head) or “tails” (shown by putting hands on bottom). A coin is tossed calling out the result, “heads” or “tails.” Those whose hand placement matches the coin toss remain standing. The game continues until one person remains standing.
**4-H Parent-Volunteer Conference**

**2019 Enrollment Form**

**Instructions:** Teens or adults attending the conference must be registered to attend workshops. All fees are due with enrollment form. Nametags will be checked for admittance.

Please Print - *(One form per participant. Make copies as needed.)*

Name: ___________________________   County: ____________________   District: ______

Address: ___________________________   City: ____________________   State: _____   Zip: ______

Email Address: ___________________________

(H) Phone: _______-______   (W) Phone: _______-______   (C) Phone: _______-______

Special dietary needs? Specify ___________________________

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<thead>
<tr>
<th>Full-Time Enrollment</th>
<th>Cost</th>
<th>Total</th>
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<tbody>
<tr>
<td>Early Bird Registration - <em>(Postmarked by May 24, 2019)</em> Luncheon, breaks, equipment, facilities and materials.</td>
<td>$40.00</td>
<td>Before May 24</td>
</tr>
<tr>
<td>Full Conference Registration - Luncheon, breaks, equipment, facilities and materials.</td>
<td>$50.00</td>
<td>After May 24</td>
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<tr>
<td>Honorees-registration includes breaks and materials. Lunch is complimentary.</td>
<td>$20.00</td>
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<tr>
<td>□ Volunteer of the Year</td>
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<td>□ Life Time Volunteer Award</td>
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**Volunteer T-shirt**- All profits from shirts go to a scholarship fund for adult volunteer development. NO shirts will be for sale on site. Pre-orders only.

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<tr>
<th></th>
<th>SM</th>
<th>M</th>
<th>LG</th>
<th>XL</th>
<th>XXL</th>
<th>XXXL</th>
<th>Total</th>
<th>@ $15 each</th>
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</thead>
</table>

No shirt orders will be taken after May 24, 2019.

**Shirt Check Payable to**

Oklahoma 4-H Foundation

IMPORTANT- *DO NOT* write one check for enrollment and a t-shirt. It will be returned and your registration delayed. We MUST have two separate payments.

Check #1 Registration Only—4-H Conferences

Check #2 Shirt Only—4-H Foundation

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**Pre-conference Interest Survey**

Workshop Presenters need to plan for potential numbers/attendees. In order to do this, please mark workshop interests/preferences. Workshops with little interest may be cancelled.

In no way does the survey provide pre-enrollment in a workshop.

□ Click 2 Science: an easy way to incorporate STEAM

□ Firing all Cylinders with STEAM

□ Full STEAM ahead with 4-H Design and Construction

□ STEAM and Music

□ Geocaching, The World’s Largest Treasure Hunt

□ The Science and Art of Civic Engagement

□ Create a SPRK for learning with Sphero SPRK+

□ Social Justice Sewing Academy-Blending Science and Art

□ Maker’s: Wind Turbine Design Challenge

□ SCRUB: Science Creates Real Understanding of Biosecurity (2 hr)

□ The Science of Bread Making (2 hr)

□ NASA STEM based activities for 4-H Clubs(2 hr)

□ Apron STEAM—Is the design practical, fashionable or sentimental?(2 hr and $5)

□ A Guide to helping the Undead (Zombie Apocalypse Training Guide)

□ Barn Quilts

□ Shopaholic’s: Science and Math Savvy!

□ To Infinity and Beyond with STEAM

□ 4-H Project Work: the Science and Art of Story Telling