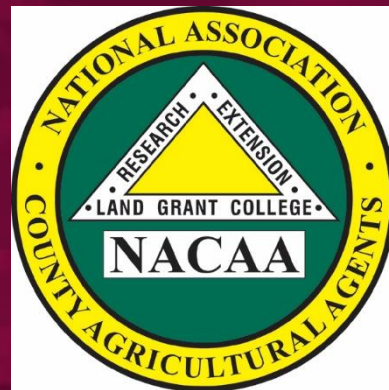


Creating Award Winning Posters



BE BOLD. Shape the Future.

New Mexico State University

Professional Excellence Committee

National Chair: Nicholas Simmons, FL

Western Vice-Chair: Bonnie Hopkins Byers, NM

Southern Vice-Chair: Brian Haller, AR

North Central Vice-Chair : Gary Gao, OH

Northeast Vice-Chair : Megan Muehlbauer, NJ



Photos courtesy of NACAA, 2019 AM/PIC



NACAA Professional Excellence: Poster Contest

PURPOSE

To showcase NACAA members' work by giving them the opportunity to present posters at the Annual Meeting/Professional Improvement Conference. The AM/PIC poster session provides an opportunity for authors to discuss with fellow members how they identified an educational or research need in their community and how the need was addressed and the observed results.

This award program has two categories to recognize NACAA members:

- **Applied Research** - gives individuals an opportunity to present a poster on applied research they conducted.
- **Extension Education** - gives members an opportunity to present a poster on new or different educational methods or technologies they have used.



What a poster IS

- A visual and engaging summary of your work
- A networking tool
- Display of excellent Extension work
- A communication tool
- A great tool for feedback
- A way to motivate and encourage agents

What a poster IS NOT

- A manuscript
- A data dump of charts
- A novel



Photo courtesy of NACAA, 2019 AM/PIC

Judging Process

The Poster Awards program is managed by the NACAA Professional Excellence Committee.

- At the AM/PIC, two teams of four judges (each region represented) will score the National Finalists posters. One team for Applied Research and one team for Extension Education.
- Judging will be done according to criteria developed by the Committee
- Judges will select the top 3 National Finalist posters in each category for awards.
- "Ribbons" will identify the top 3 and National Finalist posters.
- The outstanding posters and authors will be recognized in the NACAA newsletter.
Posters will be posted on the NACAA website following the AM/PIC



Judging process cont.

State:

- State Chairs receive posters by March 15
- State chairs should have a panel of 3 judges to review their posters in each category, selecting one winner in Extension programming and one for research.
- State Chairs must approve all abstracts by April 1st.
 - Regional Chairs cannot approve posters until they have been approved on the state level.
- Regional Chair approves abstracts by April 1st
- State chairs must submit winners (by email) to the Regional Chair by May 1st, including pdf

Regional:

- Regional Chairs select a panel of judges (from 3 of the regions states) to review the state winning posters in each category
- Regional chair will work with the National chair to approve the National finalist posters.
- National finalists (3 in each category) must be submitted (by email) to the National chair by June 1st
- Finalists in each category will be notified in early June if they are approved for display at the AM/PIC. If selected, you are expected to present during the “meet the author” session

National:

- 24 finalists (3 from each region in 2 categories) are judged at the AM/PIC
- Each regional chair nominates two judges (one for each category) from each region to judge at the AM/PIC
- Teams of judges, one from each region for each category used the scorecard to select National winners in each category



Posters for Display Only

- Posters displayed at the National AM/PIC even if they were not selected as a National finalist, but are published in the proceedings.
- Posters can count as a publication but will not be judged.
- Applicants must select “I will display at the AM/PIC if not selected as a state winner”.
- If you do not attend or display at the AM/PIC you will not be published in the proceedings.

Scorecard: Applied Research

APPLIED RESEARCH		Points allowed	Poster score
I. Scientific/Educational Merit (60 points)			
A	Hypothesis Does poster effectively describe/illustrate the hypotheses or needs behind the investigation?	0-15	
B	Sound Research Are the research methodology and statistics used in this project/study sound and appropriate?	0-20	
C	Presentation Is this presentation of research findings adequate for readers to gain a good understanding?	0-10	
D	Results Are the results of this research clearly stated? Does the poster present new and innovative information that has merit to the scientific community?	0-15	
II. Poster Presentation (35 points)			
A	Text and Graphics Uses good combinations of text and graphics to explain the message. (Presents one to three main points, etc.)	0-10	
B	Ease of Reading (Text and Graphics) Is the print each too small (on graphics or text) to read easily? Are the graphics easily understood or are they confusing and takes some effort to interpret? Are concise and easy to understand sentences used?	0-10	
C	Is the Information on the Poster Well Organized and Balanced Is the poster not crowded and has a logical order?	0-10	
D	Color and Contrast Is the poster visually attractive to readers?	0-5	
III. Follows Presentation/Mounting Instructions: (5 points)			
A.	Title, author name(s), affiliations, and address appear on the poster. Is the poster of correct size and format? Does it have a concise title?	0-5	
TOTAL POINTS		0-100	

Scorecard: Extension Education

EXTENSION EDUCATION		Points allowed	Poster score
I. Scientific/Educational Merit (60 points)			
A	Need/Goal Does the poster effectively describe/illustrate the need or goal of this educational effort?	0-15	
B	Sound Educational Practices Are the educational methods used in this project appropriate for the audience and goal? Are there a variety of delivery approaches for different learning styles?	0-20	
C	Presentation Does this presentation adequately describe the process so readers can gain a good understanding of the educational program?	0-10	
D	Summary/Results Are the results of this educational program clearly stated? Do the summary/conclusions accurately and concisely summarize the educational goals accomplished? Does the poster present new and innovative programming which has merit to Extension's future?	0-15	
II. Poster Presentation (35 points)			
A	Text and Graphics Uses good combinations of text and graphics to explain the message. (Presents one to three main points, etc.)	0-10	
B	Ease of Reading Text and Graphics Is the print (on graphics or text) easy to read? Are the graphics easily understood or are they confusing and hard to follow? Are sentences concise and easy to understand?	0-10	
C	Is the Information on the Poster Organized and Balanced Does the poster have white space and a logical order?	0-10	
D	Color and Contrast Is the poster visually attractive to readers?	0-5	
III. Follows Presentation/Mounting Instructions: (10 points)			
A.	Title, author name(s), affiliations, and address appear on the poster. Is the poster of correct size and format? Does it have a concise title?	0-5	
TOTAL POINTS		0-100	

DINGY CUTWORM (*Feltia jaculifera*) PHEROMONE LURES ARE NOT HIGHLY EFFECTIVE IN ATTRACTING THE CLOSELY RELATED GRANULATE CUTWORM (*Feltia subterranea*)



Michael D. Rethwisch and Cassandra W. Allan
University of California Cooperative Extension, Riverside County, Palo Verde Valley office,
290 N. Broadway, Blythe, CA USA 92225 mdrethwisch@ucanr.edu (760) 921-5064



BACKGROUND

Granulate cutworms (*Feltia subterranea*) can be a very damaging pest of low desert alfalfa, especially on bedded alfalfa trying to regrow after a harvest.

The caterpillars feed at night and hide during day, making detection difficult. Presence in alfalfa fields is often unknown in recently harvested fields until feeding damage is observed. With severe cases, up to a two week delay in green-up (and yield loss for the year due to delay in harvest) can occur.



Fig. 1. Feeding damage by granulate cutworm is noted by lack of green-up of recently harvested alfalfa as caterpillars eat the new growth.

While many species of moth pest moths have commercial pheromones available for utilization in monitoring, there is no commercial pheromone available for granulate cutworm.

Monitoring of granulate cutworm moths currently relies on light traps, which requires a great deal of time to sort through all the collected moths.

QUESTION TO BE ANSWERED

The dinky cutworm (*Feltia jaculifera*, same genus as granulate cutworm) has four different pheromone lures available as different races of the dinky cutworm exist.

Are any of the four dinky cutworm race pheromone lures effective in attracting granulate cutworm moths, thus potentially providing a more efficient tool for monitoring granulate cutworm moths?

METHODS AND MATERIALS

Pheromone lures of four dinky cutworm races (designated Race A, B, C & D) were obtained from Scentry Biologicals, Billings, Montana, as were blank (not infused with pheromone), natural rubber dispensers.



Fig. 2. Natural rubber dispensers were used as control or infused with the pheromone from one of our four different races of dinky cutworms to lure male granulate cutworms to traps.

Each lure was placed in its own individual bucket containing an insecticide treated strips to kill attracted moths, thus preserving scales on wings for proper identification.



Fig. 3. A set of 5 bucket traps was placed along an alfalfa field edge in 6 locations throughout the Palo Verde Valley.

Each set of 5 traps (Races A-D, + blank) was located in a line along an alfalfa field edge. Traps were approximately 150 feet apart to reduce pheromone scent overlap.

Six (6) field sites, with 5-10 miles separation between locations, were used. Each site served as a replication, with a randomized sequence of the 5 lures at each site.

Moths were collected from each trap twice/week during July-August, 2019, returned to laboratory, separated to species, counted and recorded.

Treatment means were separated and analyzed using Tukey's Honestly Significant Different (HSD) test (JMP Pro 13.0.0).

RESULTS AND DISCUSSION

Very few granulate cutworms were captured in bucket traps during 2019, even though moths were prevalent and many fields needed treatment for granulate cutworm caterpillars.

Highest numbers of granulate cutworms were collected from traps baited with lures of Race 'C', however no significant differences were noted for any lure. Number of moths collected from traps with no pheromone exceeded those of two race lures (A & D).

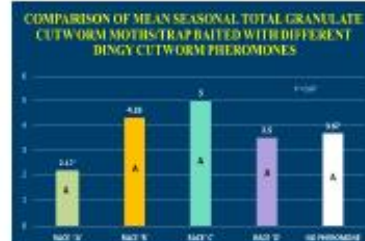


Fig. 4. Mean total granulate cutworm moths collected from bucket traps baited with lures of dinky cutworm races.

CONCLUSION

Pheromone lures of dinky cutworm from Race A, B, C or D are not highly effective in attracting moths of the closely related granulate cutworm.

Southern Women in Ag: Advanced Cattle Workshop

Knight, C.H.¹, Butcher, S.R.², Cheely, T.W.³, Hammond, K.⁴, Ray, L.⁵, Sapp, P.⁶, Tucker, J.⁷

¹ Ag and Natural Resources Agent, University of Georgia (UGA) Extension, Bulloch County, Statesboro, GA 30458 ch@uga.edu, ² Ag and Natural Resources Agent, UGA Extension, Coweta County, Newnan, GA 30263, ³ Ag and Natural Resources Agent, UGA Extension Warren County, Wamont, GA 30623, ⁴ NW Research Center Superintendent, UGA CAES, Calhoun, GA 30701, ⁵ Ag and Natural Resources Agent, UGA Extension Morgan County, Madison, GA 30650, ⁶ Ag and Natural Resources Agent, UGA Extension Jefferson County, Louisville, GA 30034, ⁷ Assistant Professor, UGA Animal and Dairy Science, Tifton, GA 31793



INTRODUCTION

The USDA accounts \$536 million worth of economic impact in Georgia to women farmers. Of the 17,779 women that identified as farming operators in Georgia in the U.S. Census for Agriculture, 53% were the spouse of the principle operator. Only 36% of those women identified as the principle farming operator. It is not from lack of skill that women are not more prevalent in the industry – but perhaps lack of confidence. Increasing the confidence of women in agricultural settings by encouraging them to experience basic agricultural techniques/skills in a stress-free, all female environment, will result in their increased involvement in agriculture. According to studies, women tend to learn more effectively with hands-on activities. Therefore, catering to women's unique learning styles will enhance their experience. These women, like all farmers, need technical advice to help their farming operations be successful. Therefore, the Southern Women in Agriculture (SWAG) Advanced Cattle Workshop was developed to provide women involved in or interested in cattle production, a comfortable learning environment to gain hands-on experience and network with other women involved in the industry.



ACKNOWLEDGMENTS

The Southern Women in Ag Advanced Cattle Workshop would not have been possible without the support of the Georgia Beef Commodity Commission and UGA Tifton.

OBJECTIVES

(1) to provide an opportunity for women involved in or interested in agriculture to receive (2) advanced training through a two-day hands-on experiential learning workshop while also providing (3) extension agent training and (4) certification in Beef Quality Assurance.

PROGRAMMATIC METHODS

A two-day hands-on training was held April 29-30, 2019 on the UGA-Tifton Campus, Tifton, GA. Each day consisted of three two-hour breakout sessions which allowed all attendees ample time to engage and participate in each of the hands-on activities provided. Six female Agriculture and Natural Resources Agents and one Specialist with UGA Extension organized and taught each station of the workshop.

Sessions included:

- **Cattle Handling / BQA Chute Side** – principles of cattle behavior and low-stress handling, sorting and moving animals through a working facility and head chute
- **Truck and Trailer Driving** – how to drive a truck with stock trailer, both bumper-pull and gooseneck, practiced hooking up, backing, loading and unloading animals
- **Tractor and Equipment** – tractor safety, operation, basic maintenance, and implements; sprayer calibration; practiced moving hay with spear and placing hay in rings to simulate common hay feeding practices
- **Media Training** – how to develop and share their ag story with others, especially those unfamiliar with ag
- **Bovine Reproduction** – basics of bovine reproduction system including standard A.I. techniques utilizing harvested repro-tracts, hands-on calving dystocia scenarios using calving simulator
- **Forages and Fencing** – basics of soil sampling; hay sampling and interpreting soil and forage analysis reports, "pasture walk" discussing pasture management, plant and weed identification, fencing materials and use

RESULTS

- Each participant earned Beef Quality Assurance Certification
- Each participant received a one-year membership to the Georgia Cattlewomen Association
- Likert-type pre and post assessments were given to determine participants self-evaluation of knowledge and comfort in each topic area.



IMPACT

- 100% of respondents said the workshop met their expectations and they would recommend to others
- 80% would be interested in future trainings geared towards women involved in ag
- Notable quotes: "I had a great time – very informative and hands-on! Freedom to ask questions and explore." "I love the hands-on experience, it helps me to understand and get over the fears I have!"

Program Participation Impact	
Parameter	Program Impact
Number of Program Participants	21 (18 attendees, 3 county agents)
Acres of Pasture Impacted	5,882 acres
Number of Cattle Impacted	1,222 head

Teen Green:

Connecting Underserved Youth to Careers in Natural Resources



Stump, K.E., University of Florida Institute of Food and Agricultural Science, Osceola County, FL 34744

Need

- Osceola County, Florida is a diverse and rapidly developing county.
- Youth from urbanized areas of the county are unfamiliar with the area's natural resources or possible environmental career paths.
- Without information or resources, many underserved high school students do not think they can attend college or pursue such careers.



Objectives

The measurable objectives were to increase knowledge in the following topics:

- ↑ 50% Soil, water, and plant science principles, sample collection, and analysis.
- ↑ 50% Environmental career paths and alternative paths to higher education.



Figure 1. a) Teen Green participants in 2018. b) Soil testing kit. c) Inside a greenhouse at Mid-Florida Research and Education Center. d) Water testing kit used for water quality lab.

Goal

The purpose of Teen Green is to introduce underserved high school youth to careers in natural resources. It is a fun and interactive 3-day workshop covering topics in water, soil, and plant sciences.

Methods

The 3-day workshop consisted of labs, lectures, games, tours, and activities. Each topic was explored with a variety of educational methods.

- Water Science:**
 - Water sample collection and quality analysis (pH, chlorine, ammonia, phosphate, and nitrate)
 - Florida's water resources presentation
- Soil Science:**
 - Soils 101 lecture
 - Soil sample collection
 - Analysis for soil texture and pH
- Plant science:**
 - Plant cutting demo and DIY project
 - Butterfly pea tea demonstration
 - Tour of greenhouses and plant science labs
- Career Education:**
 - Water resources careers game
 - Guest speakers from researchers and students at the University of Florida Mid-Florida Research and Education Center (MREC)
 - Connection with the UF MREC Undergraduate Success Coordinator
 - Testimonies from non-traditional students

Results

- 12 teens aged 15-18 attended the 3-day workshop in 2019.
- Based on average pre-/post-test scores, they increased their knowledge by:

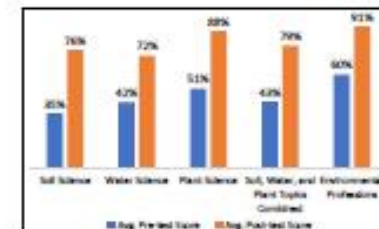


Figure 2. Average pre- and post-test scores by topic (n=12)



Impacts

- Youth participants are more likely to pursue stable career paths.
- These careers can provide them with economic stability which results in improved well-being.
- As future environmental professionals, the attendees will contribute to positive environmental impacts.

Photo credit:

An Equal Opportunity Institution, UF/IFAS Extension, University of Florida, Institute of Food and Agricultural Sciences, Nick T. Place, dean for UF/IFAS Extension. Single copies of UF/IFAS Extension publications (excluding 4-H and youth publications) are available free to Florida residents from county UF/IFAS Extension offices.

Where to begin

- Review past poster winners on the NACAA website
- Plan your Extension program with the idea of completing a poster in mind
 - Plan strong impacts and evaluations within your program
 - How can you demonstrate the change your program or research made in your community?
- Write your abstract
- Create a concept sketch of your poster as a first draft
- Remember your audience: AGENTS! Your poster is not for the public, its not for your County Commissioners, it is for your peers.
 - How can a fellow agent build upon your work within their community?
 - How did you assess the need for your work?



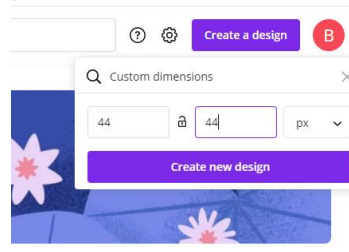
Abstracts: the key (but please don't put it on your poster!)

- The abstract text shall be between 150 - 350 words.
- Scientific names (i.e., botanical names) must be italicized.
- Do not use all capital letters. Do not underline text unless hyperlink
- Extension Education abstracts must show program impact. Applied Research abstracts must include research data.
- State the main objective and rationale for your research project or educational program.
- Outline the methods you used to accomplish your objectives.
- List your research project or educational program results or products.
- Include raw conclusions about the implications of your research project or educational program.
- No poster or abstract presented at any previous NACAA AM/PIC is allowed.



Poster Specifics

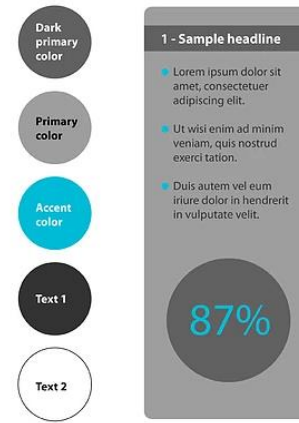
- **Poster size must be no smaller than 36" x 36" and no larger than 44" x 44".**
- Start by setting your specific dimensions
 - PowerPoint
 - Microsoft Publisher
 - Canva
 - Adobe
- Check with your University branding department for color themes and templates
- Don't forget your contact information at the top of your poster! The main goal of posters is to motivate agents, so make sure they can find you. (it doesn't hurt to add a bio picture too)



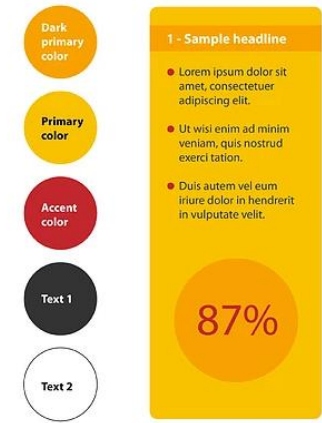
Design tips

- Limit colors to 3-5 complimentary, visually appealing colors (avoid neon bright colors unless used in moderation)
- Add eye catching (sharp!) visuals using high resolution photos
- Limit graphs to 2-3
 - Its OK to leave negative space. Do not feel the need to cover every inch of your poster with graphics or results
- Keep the background and margins clean
- Stick to 2-3 fonts
 - Use bold on titles and headlines
 - Stick with the classic fonts and avoid cursive or curling letters
 - Title fonts should be between 70-90
 - Headlines 50-60
 - Should be able to read 6 feet away
 - Text font-36
- Add directional context to your panels (lead the reader to understand HOW to read your poster—left to right; top to bottom, etc.)

Example 1



Example 2



<https://www.animateyour.science/post/how-to-design-an-award-winning-conference-poster>



Good Title
Good body text

Good Title
Good body text

Good Title
Good body text



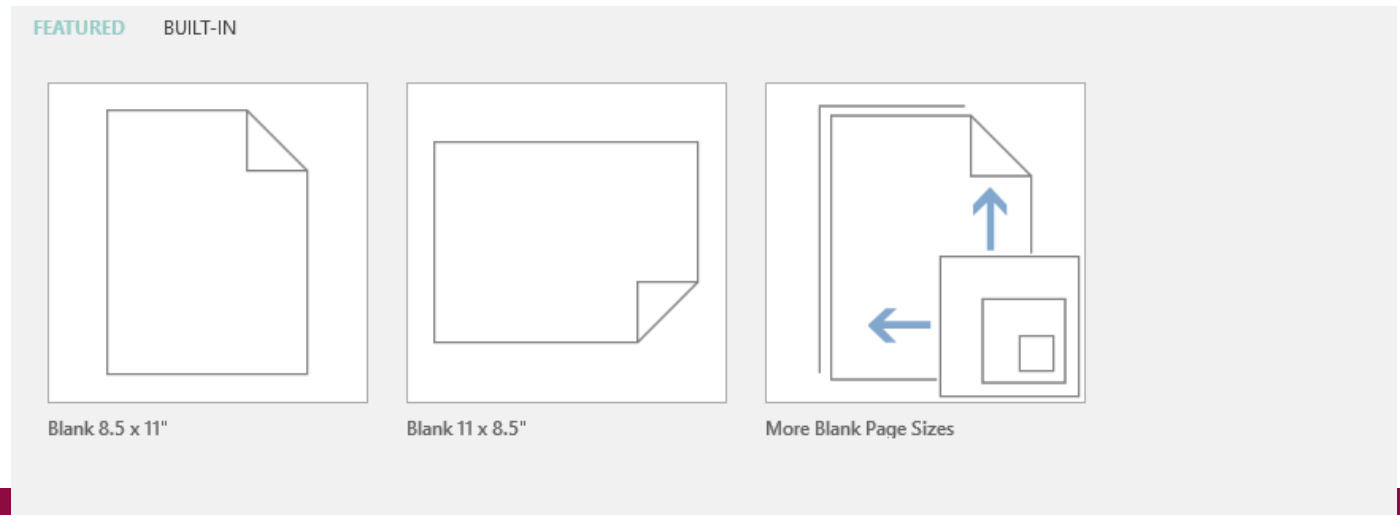
Bad Title
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BAD TITLE
BAD BODY TEXT

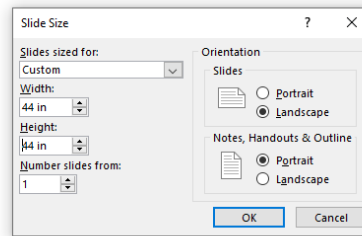
How to create a poster template: Publisher

- Open publisher
- Select More Blank Page Size option
 - Select “create new page size” and change page width and length to desired size (no smaller than 36”x36” no larger than 44”x44”)



How to create a poster template: PowerPoint

- Create “new presentation” and go to design and select “slide size” and “custom size”. Set to your desired dimensions.



Other options:

- Search for PowerPoint templates for conference posters

Printing your poster

Types of print:

Traditional rolled print

Pro:

- ✓ Sharp images
- ✓ Less expensive
- ✓ Can be printed anywhere (check with County GIS department)
- ✓ Matte, Glossy or Vinyl options

Foldable fabric posters:

Pro:

- ✓ Wont lose in airport
- ✓ Unique designs
- ✓ Easy to store



Photo courtesy of NACAA, 2019 AM/PIC

Printing services: As your fellow agents where the best location may be in your community!

Upload your poster to FedEx or UPS and they can deliver directly to the city where the conference is held. Always check with the printer to see if they can ship directly to the conference center.

<https://www.posterpresentations.com/>

Spoonflower: Fabric poster <https://www.spoonflower.com/>

Staples: <https://www.staples.com/services/printing/posters/>

Scientific Poster Printing:
<https://scientificposterprinting.com/>



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Tips and Tricks

- **Know your state chair:** contact early and as necessary
 - Double check with them that your application and PDF were received
 - Send read receipt or confirmation of delivery
- Start applications early: Submission windows open
- Make sure your pdf file is not too large to send. The NACAA website can only upload files 10MB and lower.
 - Alternatives: drop box; google docs
 - Reduce the size of your file
- Always find someone to proofread your abstract and poster for errors



Photos courtesy of NACAA, 2019 AM/PIC

Preparing for Conference Presentation

- Don't forget your pushpins (~10)
- Handout materials are allowed on the floor (bring a stand)
 - Attach an envelope below your poster with a note for agents to drop their business cards in for follow up
 - The number of business cards received may be used as a quality indicator on your promotion and tenure document. It is a great way to get feedback on your program for reporting efforts.
- Check in with the Regional chairs to be assigned your number and display area
- Posters must be hung by 5pm on Sunday before the AM/PIC-schedule accordingly
- Posters are to be taken down by 3:30pm on the final day of the trade show



Awards: good reminders

- National Winners receive up to \$500 per award and plaque (if available)
- Three National Finalists receive up to \$250 per award and plaque (if available)
- Regional and state winners receive certificate and recognition
- Looks GREAT on Promotion and Tenure Portfolios and Resumes.
- Only NACAA members will receive certificates
- When in doubt about website: Contact Scott



Photo courtesy of NACAA, 2019 AM/PIC

Resources

- Try using a design palette website to try out your color schemes: <https://www.materialpalette.com/>
- Better Posters: <http://betterposters.blogspot.com/>
- Academic Posters: <https://www.academicposter.org/>
- Creating Effective Academic Posters: <https://urc.ucdavis.edu/creating-effective-academic-posters>
- General Poster Design Principles: <https://urc.ucdavis.edu/sites/g/files/dgvnsk3561/files/inline-files/General%20Poster%20Design%20Principles%20-%20Handout.pdf>

Deadlines

Completed applications must be posted to the NACAA website by March 15 along with a completed poster pdf





Thank you!



BE BOLD. Shape the Future.