

**CLASS - Climate Literacy for  
Agriculture and Sustainable Societies**  
*Virtual Conference June 15th - 17th*

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# What is CLASS?



**CLASS** (Climate Literacy for Agriculture and Sustainable Societies) is a program that is part of The University of Tennessee Martin/Murray State Climate Change Education Initiative



**CLASS** is funded by the Capacity Building Grants for Non-Land Grant Colleges of Agriculture Program (NLGCA), USDA-NIFA  
(PROJ NO: TENW-2016-06721)



**CLASS** was started to address the gap in perception and understanding regarding climate change science among stakeholders in rural communities with a focus on teachers & students



**CLASS** consists of creating web-based courses, educational materials for climates change science lessons, and research opportunities for students at the post-secondary level



@CLASSatUTM

# Meet the Team!



**Rachna Tewari, Ph.D.**

Principal Investigator  
Associate Professor of  
Agricultural Economics



**Mark Simpson, Ph.D.**

Co-Principal Investigator  
Professor of Geography



**Joey Melhorn, Ph.D.**

Co-Principal Investigator  
Parker Chair of Excellence  
Professor of Agricultural  
Economics



**Bryanna Allison**

Graduate Researcher



**Erin Barnes**

Graduate Researcher



**Tamara Sterrett**

Graduate Researcher



**Montana Wright**  
Undergraduate Researcher



**Anna Gafford**  
Undergraduate Researcher



**Brian Parr,**  
Ph.D Co-PI



**Naveen Musunuru,**  
Ph.D Co-PI

# Objectives for the Conference

## Day 1 Awareness

**Learning Objectives Day 1,** Upon completion of day 1, participants will be able to:

1. Discuss importance of climate change education for agriculture and rural communities.
2. Describe learning opportunities for Kentucky and Tennessee students in the science of climate change.

## Day 2 Development

**Learning Objectives Day 2,** Upon completion of day 2, participants will be able to:

1. Utilize applied educational tools for climate change education in agriculture and the environment.
2. Share content connection innovations with fellow educators.

## Day 3 Action

**Learning Objectives Day 3,** Upon completion of day 3, participants will be able to:

1. Identify future action steps for climate change education in their local community.
2. Evaluate the utility of content connection innovations in my local context.

# Community Guidelines for CLASS

Here are some best practices to make your CLASS experience a success!

1

## Camera: On

We'd like to try and make connections as best we can during the conference. Keep your camera on if possible.

2

## Use your Hand

To keep the flow going as we interact on Zoom, try to digitally raise your hand for questions or use the chat.

3

## Green & Red

We will ask poll questions on Zoom, be sure to use the green "check" and red "x" to respond.

4

## Community Time

The communities on Whova are for connecting outside of sessions. Don't be afraid to start a group or conversation!

5

## Tough Topic

Climate Change Science is a big and complex topic. Don't be afraid to ask questions in the session Q & A!

6

## Every Email

Expect emails before the conference, and during the conference we'll also alert you for sessions.

7

## Log-In Info

Be sure to use the email you used to register for your log-in to Whova. That way your accounts will match up.

8

## Timing

All times are in CST. Be sure to keep that in mind as we begin and end sessions during the conference.

9

## Well Done Websites

Both Whova and the CLASS website will be accessible after the conference. Be sure to use both as a resource.

**Remember! If you have a question, please don't hesitate to reach out to one of the organizers!**

**Conference Content?**

Dr. Rachna Tewari, UT Martin ([rtewari@utm.edu](mailto:rtewari@utm.edu)) or Dr. Joey Mehlhorn, UT Martin ([jmehlhor@utm.edu](mailto:jmehlhor@utm.edu))

**Technology?**

Dr. Daniel Foster, GTAN ([foster@psu.edu](mailto:foster@psu.edu)) or Carson Letot, GTAN ([ctl84@psu.edu](mailto:ctl84@psu.edu))

# Agenda at a Glance

Tuesday,  
June 15th

## Awareness

*Why is Climate Change Education critical for student success?*

4pm-7pm



- Opening from CLASS conference hosts
- Presentation from Dr. Stuart Foster,  
*"Climate Change: Would You Recognize It if You Saw It?"*
- Mini presentations (UG and Graduate student CLASS researchers, UT Martin)

Wednesday,  
Jun 16th

## Development

*How can educators incorporate Climate Change Education in their programs?*

**8:30 - Networking Time**

**9:00 - Panel Introductions**



- **Dr. Eric Pelren, University of Tennessee Martin**
  - *"Fostering climate leadership in higher education: A public university's approach"*



- **Mr. Will Tollefson, Eastern Tennessee State University**
  - *"Climate Data Resources and Applications for Tennessee"*



- **Dr. Donna McCallister, Texas Tech University**
  - *"Climate Challenges and Successes: Lessons from Texas"*



- **Mr. Carson Letot, GTAN at Penn State University**
  - *"Working with the Global Teach Ag Network to catalyze student-led applied STEM projects"*

**10:15 - Audience Questions**

**10:50 - Concluding remarks**

# Agenda at a Glance

## 1:00 - Welcome Back & Mini workshop

- **Monash Model:**
  - A quick dive into the basics of The Monash University Interactive Simple Climate Model (MSCM) a web-based interface to explore the physical simulation of the climate system with a real global climate model.
- **Climate Dice Game:**
  - Participants will figure out the interactions among the various components of the earth's climate system (ECS) with chains of interactions.
- **Climate wedges game:**
  - A game to explore strategies to mitigate agriculture's carbon input across different sectors. Teams select strategies that will reduce carbon footprint based on benefit to costs ratio.

## 3:45 pm - Climate Change Curriculum Challenge

- **Work session with groups**
  - Groups will meet each other, prepare the Lightning Presentation, and plan out resource development for submission on the CLASS website on June 25th.

## 4:30pm - Wrap up Day 2

Thursday,  
Jun 17th

### Action

*How can my students engage locally in global climate change education?*

## 8:30am - noon



- Keynote presentation from Dr. Jennifer Williams, Founder of TAG and Teach SDGs
- Lightning Presentations
- Closing remarks

# Our Speakers

## Opener

### Stuart Foster Ph.D



State Climatologist and Director of the Kentucky Climate Center & Kentucky Mesonet, he's also the President of AASC and a Professor of Geography at Western Kentucky University

## Keynote

### Jennifer Williams Ph.D



25 years of experience in the field of education through her roles as an education activist, professor, school administrator, literacy specialist, classroom teacher, and author of the book Teach Boldly.

## The Panelists

### Donna McCallister Ph.D



Assistant Professor  
Agricultural and Applied Economics  
Texas Tech University

### Eric Pelren Ph.D



Professor  
Department of Agriculture, Geosciences, and Natural Resources  
University of Tennessee Martin

### William Tollefson



Lecturer  
Tennessee Climate Office  
East Tennessee State University

### Carson Letot



Graduate Associate  
Global Teach Ag Network  
Penn State University

# Student Research Presentations

**Montana Wright**



**Climate vs. Cattle Prices**

*Analyzing Cattle Auction Bids  
with Climate Data: A Study from  
Cattle Production Areas in the  
U.S Mid-South*

All research including the presentation manuscripts from the CLASS student researchers as well as publications from the CLASS faculty can be found on the website at:  
<http://www.utm.edu/staff/rtewari/CLASS/research.html>

**Anna Gafford**



**Carbon Emissions &  
Agriculture**

*A Study on Calculating Overall  
Carbon Emissions from  
Different Cropping Practices in  
Agricultural Production in  
West Tennessee*

**Bryanna Huggins**



**The Future of Extreme  
Weather**

*Relating Tornado Activity  
Changes in the United States  
with Changes in Atmospheric  
Blocking*

# The Climate Change Curriculum Challenge

## Goal

There is a gap in perception and understanding regarding climate change among stakeholders. The Climate Change Curriculum Challenge is a competitive opportunity for educators to work together to present a proposal and compile a curated collection of artifacts that any teacher can pick up and use to catalyze their students in climate change science.

## Timeline

**June 9th**  
Contest  
Announcement on  
Social Media and  
participant email

**June 16th**  
Contest begins with  
work session in the  
afternoon of the  
CLASS conference

**June 17th**  
Lightening  
presentations during  
morning session of  
CLASS conference

**June 15th**  
Entries are due on  
website through  
Google Form link at  
5pm CST

## Deliverables

### Lightning Presentations

- June 17th
- Details
  - 2 Minute talks
    - Items to consider: Introduction, Brief overview, Connection to climate change science, Professionalism, Adherence to time limit
    - Fan vote included for all participants in addition to judge panel!

### Curriculum Challenge

- June 25th
- Details
  - Lesson plans
    - Items to consider: Interest approach, Timing, educational objectives, Resources & Materials, Lesson logistics, Assessment, Connection to climate change science
  - Lab activity
    - Items to consider: Scenario, Timing, Objectives, Resources & Materials, Lab Logistics, Lab questions
  - Summative Assessment
    - Items to consider: Assessment tool, Assessment key, appropriate difficulty for secondary ed

## Details

- The Whova site will be home-base for the CLASS conference and the work sessions, the CLASS website will be home-base for the details and submission link.
- Sample topics include:
  - Agriculture and Climate Change, Water resources and Climate change, Climate change and society, The science of climate change, Land and soil management under a changing climate, Animal health and climate change, Local food production and climate change, and Sustainable agriculture and climate change

\*All teams who submit the final materials will receive a free Digital Pass to the 2022 Global Learning in Agriculture Conference!

## Questions?

Dr. Rachna Tewari, UT Martin ([rtewari@utm.edu](mailto:rtewari@utm.edu)) or Carson Letot, GTAN ([ctl84@psu.edu](mailto:ctl84@psu.edu))

# Our Platform: WHOVA



Working with Whova is as easy as 1, 2, 3!

1. Check your email for the invitation. (be sure to use the same email you registered with to log-in)
2. Use the agenda to enter sessions. (Zoom will automatically launch when you enter)
3. Check in on communities or form your own to keep the conversations going!

The screenshot shows the WHOVA web interface. At the top, it displays the conference name "Climate Literacy for Agriculture and Sustainable Societies Conference" and the dates "Jun 14 - 18, 2021". A search bar is present at the top right. The main navigation menu on the left includes Home, Agenda, Attendees, Messages (with a red notification badge), Photos, Resources (Leaderboard, Session Q&A, Video Gallery, Polls, Speakers, Twitter, Whova Guides), and WHOVA.

The agenda view shows a timeline from Tuesday, June 15, to Wednesday, June 16. A session titled "CLASS Conference Opening" is listed for 4:00 PM on Tuesday. Another session, "CLASS Research Presentations", is listed for 5:00 PM on Tuesday. Buttons for "View Session" and "Add to My Agenda" are visible next to each session entry. A large orange box labeled "3" highlights the "Messages" menu item.



## Climate Literacy for Agriculture and Sustainable Societies Conference Official Event App

- Explore the professional profiles of event speakers and attendees
- Send in-app messages and exchange contact info
- Network and find attendees with common affiliations, educations, shared networks, and social profiles
- Receive update notifications from organizers
- Access the event agenda



Remember to check your email for updates!

## Questions?

Dr. Daniel Foster, GTAN (foster@psu.edu) or Carson Letot, GTAN (ctl84@psu.edu)

# CLASS Conference Partners



MURRAY STATE  
UNIVERSITY



United States Department of Agriculture  
National Institute of Food and Agriculture

## Future Professional Development Opportunities

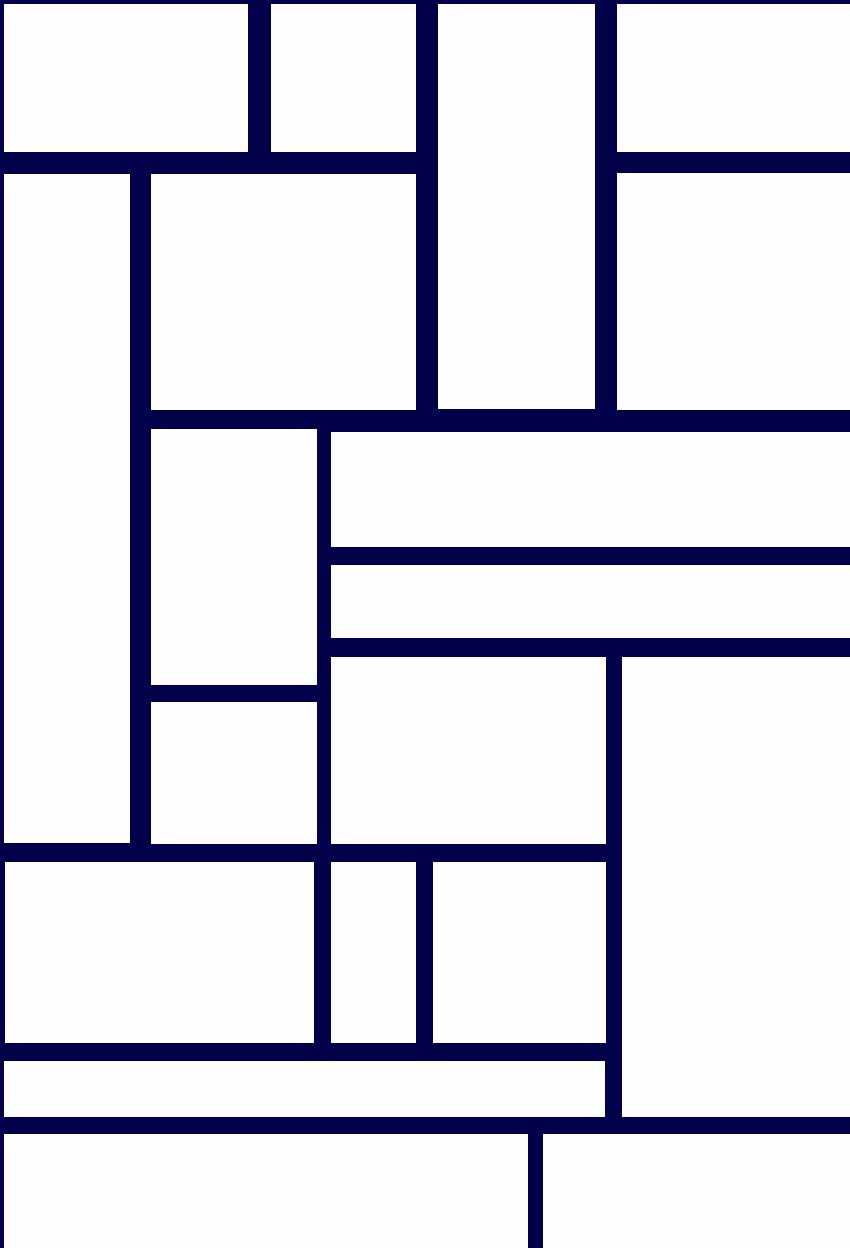


Feb 7th - 11th, 2022

Register NOW to save your spot and claim  
your digital pass!

<https://tinyurl.com/GLAG22>





**UT MARTIN**



United States Department of Agriculture  
National Institute of Food and Agriculture

<https://www.utm.edu/staff/rtewari/CLASS>