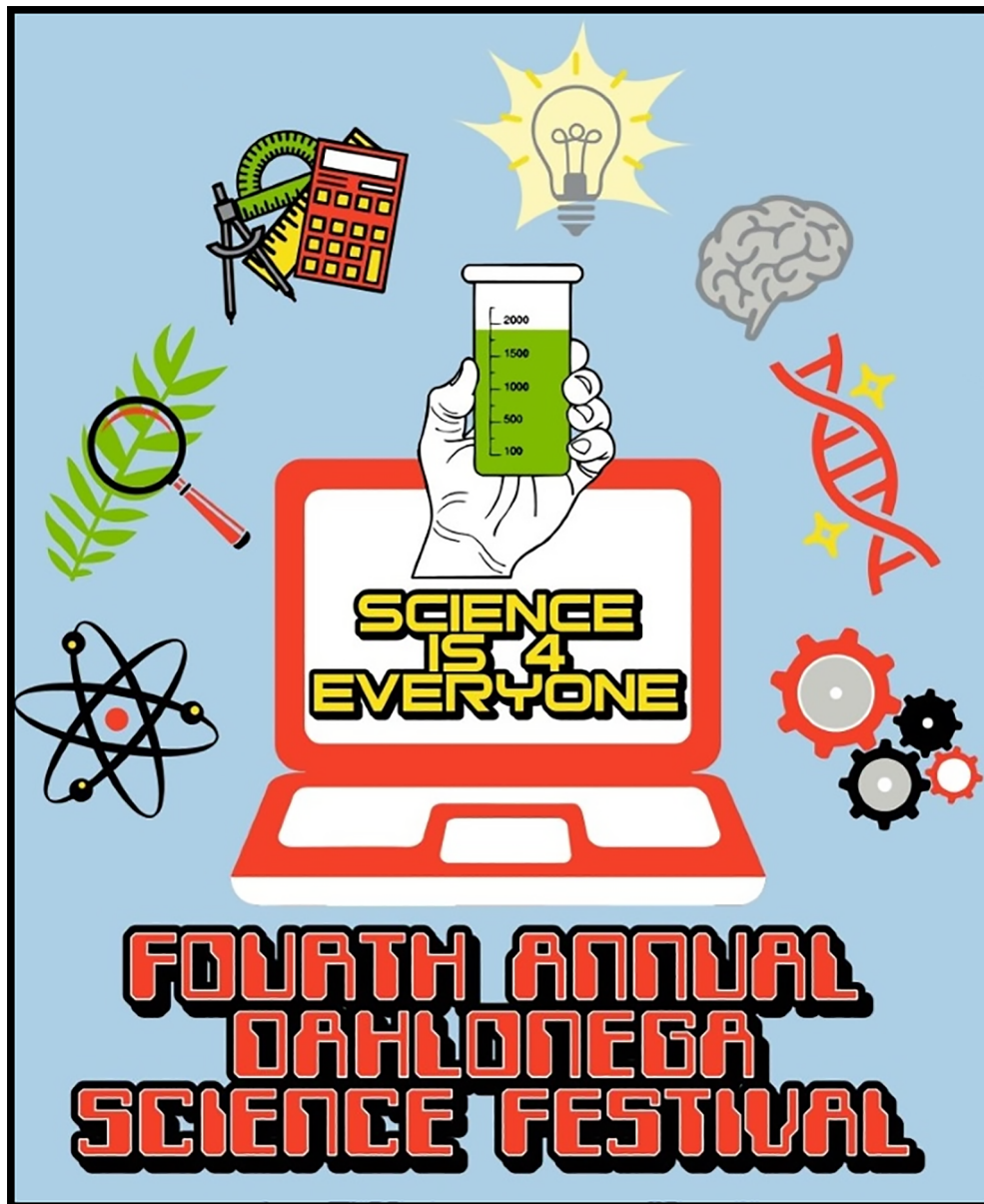


PROGRAM*



The 4th annual Dahlonega Science Festival held on
March 5-6th, 2021
virtually through Zoom, Facebook Live, and Twitch.

*The program that follows is based on the website information found at dahlonegascience.org for the 2021 festival.

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Dahlongega Science Council

Fun, informative, community-based science in Dahlongega!

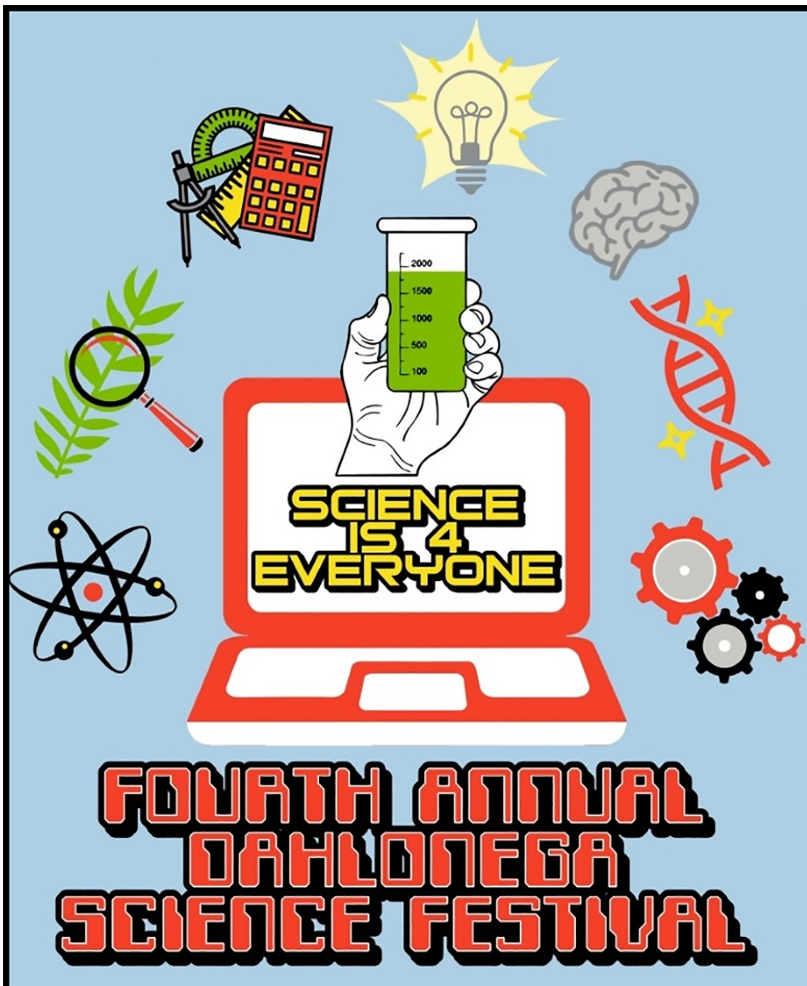
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Dahlongega Science Festival 2021 (DSF 2021)

Submitted by dahlongegascience on Mon, 01/04/2021 - 17:59

Join us ONLINE for the fourth annual Dahlongega Science Festival, **Science is 4 Everyone**, on March 5th and 6th, 2021.

[REGISTER HERE](#) for all 2021 festival activities. Zoom links will be sent via email on the festival weekend.



Event Information:

- [Festival SCHEDULE](#)
- [Keynote Talk & Speaker](#)
- [Panels & Panelists](#)
- [Planetarium Show](#)
- [Storytime with Scientists](#)
- [Kids' Activity Supply List](#)
- [Recommended Science Themed Books](#)

Other Information:

- [Merchandise: Mugs and Lab in a Bag](#)
- [Free Raffle!](#)
- [Location: Parking & Maps](#)
- [Become a Sponsor!](#)
- [Dahlonga Science Council: Board & Contributors](#)

Keynote Speaker:

Dr. Charles Blaha holds a Ph.D. in Psychopharmacology and Neurochemistry from the Institute of Neuroscience at University of Oregon, and he is currently Professor and Director of Research Mayo Neural Engineering Laboratories in the Department of Neurosurgery at Mayo Clinic in Rochester, MN.

Check out the sponsorship opportunities for the 2021 Festival
HERE!



[Science Festival Schedule \(DSF 2021\)](#)

- ▶ [Talks \(DSF 2021\)](#)
- ▶ [Panel Discussions \(DSF 2021\)](#)
- [Family Activities \(DSF 2021\)](#)
- [Planetarium Shows \(DSF 2021\)](#)
- [Merch, LAB kits, and Swag!!](#)
- [Event Locations, Parking, & Map \(DSF 2021\)](#)
- [Festival Poster \(DSF 2020\)](#)
- [Board of Directors \(DSF 2020\)](#)
- [Festival Sponsors/Donors \(DSF 2020\)](#)

[Science Festival Schedule \(DSF 2021\) >](#)



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Science Festival Schedule (DSF 2021)

Submitted by dahlongascience on Thu, 03/01/2018 - 14:46

FRIDAY, MARCH 5th: Opening Night!

The 2021 Festival is being held online. Don't forget to pick-up your Lab in a Bag supply kit for at-home kids' experiments from the UNG Dahlonga, Gainesville, and Cumming campuses. [Order your Lab in a Bag supply kit here.](#)

(5:00pm - released on YouTube) [Planetarium Show](#): *Wonder Women of Astrophysics*
(Video available throughout the festival.)

(5:00 - 7:00pm - Zoom) [Family At-home Experiments](#): Three rooms of activities, see the schedule below.

(7:00pm - Zoom) [Keynote Speaker](#): Dr. Charles Blaha - *Paralysis and Tremors: New Medical Advances and Devices*

(8:30pm - Facebook Live & Twitch) Telescope Live-Stream: North Georgia Astronomical Observatory

| | Family Zoom Room A | Family Zoom Room B | Family Zoom Room C |
|--------|--------------------|-------------------------|---------------------|
| 5:00pm | Paper Circuits* | Touchy Brain Stuff | Marshmallow Bridge* |
| 5:30pm | Stroop Effect | Lemon Personality Test* | Change Blindness |
| 6:00pm | Stroop Effect | False Memories | Paper Circuits* |

| | | | |
|---------------|---------------|-----------------|--------------------|
| 6:30pm | Stroop Effect | Paper Circuits* | Touchy Brain Stuff |
|---------------|---------------|-----------------|--------------------|

*Supplies needed. [Order a complete Lab in a Bag supply kit here](#) or see the [supply lists here](#).

SATURDAY, MARCH 6th: Main Events!

Join us online for many great events from family activities to panel discussions, extract DNA, play brain games, build a bridge, discuss science - it's going to be a great time!

[Panel Discussions](#)

[Family Activities](#): Story Time, Lab in a Bag at-home experiments, and Yoga

(8:30pm - Facebook Live & Twitch) Telescope Live-Stream: North Georgia Astronomical Observatory

| | Story Time Zoom Room OR Panels Zoom Room | Family Zoom Room A | Family Zoom Room B | Family Zoom Room C |
|----------------|---|---------------------------|---------------------------------|---------------------------|
| 10:00am | Story Time with Scientists: <i>Underground</i> by Denise Fleming | Marshmallow Bridge* | Make Your Own Lava Lamp* | Lemon Personality Test* |
| 10:30am | Story Time with Scientists: <i>A Butterfly is Patient</i> by Dianna Aston | Paper Circuits* | Change Blindness | False Memories |
| 11:00am | Story Time with Scientists: <i>A Hundred Billion Trillion Stars</i> by Seth Fishman | Lemon Personality Test* | Isolating DNA from Strawberries | Paper Circuits* |
| 11:30am | Story Time with Scientists: <i>Twilight Hunt</i> by Narelle Oliver | False Memories | Touchy Brain Things | Marshmallow Bridge* |
| 12:00pm | | Density Tower* | Fireworks in a Jar* | Change Blindness |
| 12:30pm | Confronting Pandemics | | | |
| 1:30pm | | Yoga Safari | False Memories | Paper Circuits* |
| 2:00pm | Energy and the Environment | | | |


| | | | | |
|---------------|----------------------|-------------------------|-------------------------|---------------------|
| 3:00pm | | Yoga Safari | Touchy Brain Stuff | Marshmallow Bridge* |
| 3:30pm | Scientific Consensus | | | |
| 4:30pm | | Yoga Safari | Lemon Personality Test* | Change Blindness |
| 5:00pm | | Lemon Personality Test* | Paper Circuits* | Touchy Brain Stuff |

*Supplies needed. [Order a complete Lab in a Bag supply kit here](#) or see the [supply lists here](#).

[< Dahlonga Science Festival 2021 \(DSF 2021\)](#) [Up](#) [Talks \(DSF 2021\) >](#)

Schedule for Friday 3/5/2021:

| Friday, March 5th - Activities in Zoom Room A | | |
|---|----------------|---|
| Time: | Activity: | Supplies Needed: |
| 5:00pm | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |
| 5:30pm | Stroop Effect | No supplies needed; just log in and have fun! |
| 6:00pm | Stroop Effect | No supplies needed; just log in and have fun! |
| 6:30pm | Stroop Effect | No supplies needed; just log in and have fun! |




Keynote Address at 7:00pm on Friday March 5th:

Paralysis and Tremors: New Medical Advances and Devices



Presented by Dr. Charles Blaha
 Researcher and Professor at the Mayo Clinic

| Friday, March 5th - Activities in Zoom Room B | | |
|---|--------------------|---|
| Time: | Activity: | Supplies Needed: |
| 5:00pm | Touchy Brain Stuff | No supplies needed; just log in and have fun! |
| 5:30pm | Personality Test | Included in LAB kit: Q-tip, string, lemon juice |
| 6:00pm | False Memories | No supplies needed; just log in and have fun! |
| 6:30pm | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |



Observatory Event at 8:30pm on Friday March 5th:


Telescope Live-Stream:

North Georgia Astronomical Observatory




Presented on Facebook Live and Twitch

| Friday, March 5th - Activities in Zoom Room C | | |
|---|--------------------|---|
| Time: | Activity: | Supplies Needed: |
| 5:00pm | Marshmallow Bridge | Included in LAB kit: toothpicks, bag of marshmallows |
| 5:30pm | Change Blindness | No supplies needed; just log in and have fun! |
| 6:00pm | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |
| 6:30pm | Touchy Brain Stuff | No supplies needed; just log in and have fun! |



Planetarium Show!!

The Wonder Women of Astrophysics!



Available to watch throughout the weekend of the festival on the UNG Planetarium's YouTube page!

Schedule for Saturday 3/6/2021:

| Saturday, March 6th - Activities in Zoom Room A | | |
|---|--------------------|---|
| Time: | Activity: | Supplies Needed: |
| 10:00am | Marshmallow Bridge | Included in LAB kit: toothpicks, bag of marshmallows |
| 10:30am | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |
| 11:00am | Personality Test | Included in LAB kit: Q-tip, string, lemon juice |
| 11:30am | False Memories | No supplies needed; just log in and have fun! |
| 12:00pm | Density Tower | Included in LAB kit: corn syrup, rubbing alcohol, vegetable oil |
| 1:30pm | Yoga Safari | No supplies needed; just log in and have fun! |
| 3:00pm | Yoga Safari | No supplies needed; just log in and have fun! |
| 4:30pm | Yoga Safari | No supplies needed; just log in and have fun! |
| 5:00pm | Personality Test | Included in LAB kit: Q-tip, string, lemon juice |



| Saturday, March 6th - Activities in Zoom Storytime Room | | |
|---|-------------|--|
| Time: | Activity: | Book that will be read to attendees: |
| 10:00am | Story time! | Underground, by Denise Fleming |
| 10:30am | Story time! | A Butterfly is Patient, by Dianna Aston |
| 11:00am | Story time! | A Hundred Billion Stars, by Seth Fishman |
| 11:30am | Story time! | Twilight Hunt, by Narelle Oliver |



| Saturday, March 6th - Activities in Zoom Room B | | |
|---|--------------------|---|
| Time: | Activity: | Supplies Needed: |
| 10:00am | Make a Lava Lamp | Included in LAB kit: food coloring, vegetable oil, alka seltzer |
| 10:30am | Change Blindness | No supplies needed; just log in and have fun! |
| 11:00am | Strawberry DNA | Included in LAB kit: rubbing alcohol, dish soap, coffee filter |
| 11:30am | Touchy Brain Stuff | No supplies needed; just log in and have fun! |
| 12:00pm | Fireworks in a Jar | Included in LAB kit: vegetable oil, food coloring |
| 1:30pm | False Memories | No supplies needed; just log in and have fun! |
| 3:00pm | Touchy Brain Stuff | No supplies needed; just log in and have fun! |
| 4:30pm | Personality Test | Included in LAB kit: Q-tip, string, lemon juice |
| 5:00pm | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |



| Panel Presentations on Saturday, March 6th: | | |
|---|-----------------------------------|---|
| 12:30pm | Confronting Pandemics | Nancy Dalman, UNG Cornelia Lambert, UNG Neil Lin, UNG Supriya Reddy, UNG |
| 2:00pm | Energy and the Environment | Patrick Bunton, UNG Victoria Hightower, UNG David Patterson, UNG Thomas Vogel, UNG |
| 3:30pm | Scientific Consensus | Josh Cuevas, UNG Royce Dansby-Sparks, UNG Bryan Dawson, UNG Margaret Smith, UNG |



| Saturday, March 6th - Activities in Zoom Room C | | |
|---|--------------------|---|
| Time: | Activity: | Supplies Needed: |
| 10:00am | Personality Test | Included in LAB kit: Q-tip, string, lemon juice |
| 10:30am | False Memories | No supplies needed; just log in and have fun! |
| 11:00am | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |
| 11:30am | Marshmallow Bridge | Included in LAB kit: toothpicks, bag of marshmallows |
| 12:00pm | Change Blindness | No supplies needed; just log in and have fun! |
| 1:30pm | Paper Circuits | Included in LAB kit: copper tape, LED lights, battery |
| 3:00pm | Marshmallow Bridge | Included in LAB kit: toothpicks, bag of marshmallows |
| 4:30pm | Change Blindness | No supplies needed; just log in and have fun! |
| 5:00pm | Touchy Brain Stuff | No supplies needed; just log in and have fun! |





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Talks (DSF 2021)

Submitted by dahlonegascience on Wed, 02/21/2018 - 18:28

FRIDAY, MARCH 5th on Zoom

Join us for our opening night as we welcome our keynote speaker to kick off the Festival!

(7:00pm) Dr. Charles Blaha - keynote speaker

Paralysis and Tremors: New Medical Advances and Devices

This presentation will overview Mayo Clinic Neural Engineering Laboratories recent innovations in invasive and non-invasive techniques and next-generation devices that have provided remarkable benefits to patients that were once thought to be untreatable with current technologies.

[Speaker Information \(DSF 2021\)](#)

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Speaker Information (DSF 2021)

Submitted by dahlonegascience on Sat, 03/03/2018 - 21:59

Guest Speakers



Dr. Charles Blaha holds a Ph.D. in Psychopharmacology and Neurochemistry from the Institute of Neuroscience at University of Oregon, and he is currently Professor and Director of Research Mayo Neural Engineering Laboratories in the Department of Neurosurgery at Mayo Clinic in Rochester, MN.

His research interests span basic and clinical research to include the neurobiological bases of addictive disorders, autism spectrum disorders, and the neurophysiological and neurochemical mechanisms of deep brain stimulation in the treatment of neurological and psychiatric disorders. He has spent more than 40 years developing electroanalytical techniques for *in vivo* detection of neurochemicals, such as dopamine, serotonin, and adenosine, in the mammalian central nervous system (rodents, swine, non-human primates, and humans) and development of novel neurochemical recording sensors.

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Panel Discussions (DSF 2021)

Submitted by dahlonegascience on Wed, 02/21/2018 - 18:11

Saturday, March 6th via Zoom

All of our panels this year will be held via Zoom & Facebook Live on Saturday March 6th at the specific times indicated below. Bring some of your own questions to be discussed, or generate new questions as our science specialists discuss these topics!

12:30pm – Confronting Pandemics

While SARS-CoV-2, commonly known as COVID-19, is the most recent and ongoing example of the havoc that a global pandemic can cause, it is not the first time the world has experienced global viral spread. In fact, having been here before, humans have collectively accrued significant amounts of experience dealing with airborne diseases over time. In the first days and weeks of the COVID pandemic many comparisons were made with the 1918 flu pandemic (also known as the Spanish Flu), for example. That pandemic, now over a century in the past, confronted the United States and the world with a global crisis in a very different era when preparedness and public health strategies were approached in very different ways. Our panel of experts will discuss what the pandemics of the past have taught us, how they changed medical and societal norms in their aftermath, and what lessons we may be able to learn from COVID-19 to better address the inevitable pandemics of the future.

- Cornelia Lambert (UNG, History of Science and Medicine)
 - Neal Lin (UNG, Epidemiology/Biology)
 - Supriya Reddy (UNG, Public Health)
-

2:00pm – Energy and the Environment

Society's growing energy demands seem wholly incompatible with our need to drastically reduce the emissions of carbon dioxide and other greenhouse gases to reduce the impacts of climate change, given our heavy reliance on burning fossil fuels for energy production. However, with increasing research and technology efforts over the last several decades our efforts to harness renewable sources of energy have become more affordable and are on track to compete economically with the use fossil fuels in the very near future. Our diverse panel will discuss some of the implications of this competition between the reliance of large economies on fossil fuel production and the global need to make systemic changes to preserve the climate for future generations, as well as local and regional efforts to address sustainability by adapting to small-scale sustainable agricultural practices.

- Patrick Bunton (UNG, Physics)
- Victoria Hightower (UNG, Environmental History)
- David Patterson (UNG, Paleontology)

3:30pm – Scientific Consensus

In order to make a real-world impact, a scientific discovery requires more than just overwhelming agreement among scientists in the field - it also requires effective communication to the public. How do scientists come to agree upon a scientific fact? How does the way in which this fact is communicated to the public affect how readily it is accepted by the general public? It takes more than just good science itself for a discovery to make an impact in society, and a simple misstep in science communication has the potential to stymie its societal benefits. Our panel of experts will discuss the process through which scientists come to agreement, as well as the crucial process of effective science communication to the general public.

- Josh Cuevas (UNG, Educational Psychology)
- Royce Dansby-Sparks (UNG, Chemistry)
- Bryan Dawson (UNG, Organizational Psychology)
- Meg Smith (UNG, Biology)

[Meet the Panelists \(DSF 2021\)](#)

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Meet the Panelists (DSF 2021)

Submitted by mantry on Wed, 02/28/2018 - 22:42

****Saturday, March 6th via Zoom****

12:30pm – Confronting Pandemics

While SARS-CoV-2, commonly known as COVID-19, is the most recent and ongoing example of the havoc that a global pandemic can cause, it is not the first time the world has experienced global viral spread. In fact, having been here before, humans have collectively accrued significant amounts of experience dealing with airborne diseases over time. In the first days and weeks of the COVID pandemic many comparisons were made with the 1918 flu pandemic (also known as the Spanish Flu), for example. That pandemic, now over a century in the past, confronted the United States and the world with a global crisis in a very different era when preparedness and public health strategies were approached in very different ways. Our panel of experts will discuss what the pandemics of the past have taught us, how they changed medical and societal norms in their aftermath, and what lessons we may be able to learn from COVID-19 to better address the inevitable pandemics of the future.



Nancy Dalman's research interests are in the broad area of environmental toxicology. Specifically she is interested in the innate biochemical and cellular defenses organisms possess to protect them from toxic chemicals in the environment. Currently she is working with the small salt marsh fish *Fundulus heterociltus* (killifish), a species that is very tolerant of fluctuations in its physical environment. Her students and she are studying the effects of common environmental contaminants on behaviors such as feeding and optomotor response (important for successful schooling) and on a protein called p-glycoprotein that provides cellular protection by pumping toxicants from the cell.

She also has an interest in the scholarship of teaching and learning and, in particular, how inquiry – based classroom activities influences successful material comprehension and critical thinking skills.



Cornelia Lambert is a native of Augusta, Georgia. She studied in North Carolina, Florida, Scotland, and Oklahoma before joining the University of North Georgia faculty. Her expertise is in the history of science and medicine.



Neal Lin is a lecturer in the Biology Department at the University of North Georgia (UNG) – Gainesville campus. He holds a Bachelor of Science in Microbiology from the University of California, San Diego, a Master of Public Health in Epidemiology of Microbial Diseases from Yale School of Epidemiology and Public Health, and a Doctorate of Medicine from Ross University. Prior to coming to UNG, he was an epidemiologist in the public health arena for over 10 years. During that time, Dr. Lin has worked on HIV/AIDS, dengue virus, avian influenza (H5N1), pandemic preparedness, emergency response, waterborne diseases and bioterrorist agents. He received a Fulbright scholarship and was a researcher at the College of Public Health at the National Taiwan University. He was an epidemiologist with the Los Angeles County Department of Public Health, the McHenry County (IL) Department of Health, and most recently with the Centers for Disease Control and Prevention (CDC). Dr. Lin's interests are in communicable diseases and he combines his clinical and public health training to better understand health conditions and determine best strategies to prevent diseases. He is currently interested in how students learn and effective learning strategies and he is excited to be in higher education. Dr. Lin is grateful to be able to share his experiences and expertise with the UNG community.



Supriya Reddy has research interests that are in the broad area of public health. Specifically, the utilization of health behavior theory to examine risky substance abuse behaviors among college students. Currently, she is examining theoretical predictors related to the mixing of alcohol and energy drinks among college undergraduates and plans to extend her research to other risky college health behaviors. She also has an interest global health initiatives, which have led her to both South Africa and India. These endeavors involved the implementation of health education efforts related to tuberculosis, HIV/AIDS, nutrition, and hand washing techniques.

2:00pm – Energy and the Environment

Society's growing energy demands seem wholly incompatible with our need to drastically reduce the emissions of carbon dioxide and other greenhouse gases to reduce the impacts of

climate change, given our heavy reliance on burning fossil fuels for energy production. However, with increasing research and technology efforts over the last several decades our efforts to harness renewable sources of energy have become more affordable and are on track to compete economically with the use fossil fuels in the very near future. Our diverse panel will discuss some of the implications of this competition between the reliance of large economies on fossil fuel production and the global need to make systemic changes to preserve the climate for future generations, as well as local and regional efforts to address sustainability by adapting to small-scale sustainable agricultural practices.



Patrick Bunton is the Department Head of the Department of Physics and Astronomy at the University of North Georgia.



Victoria Hightower earned her Ph.D. in 2011 from Florida State University. Her research focuses on the pearl trade, history and heritage in the United Arab Emirates 1800–present. She teaches courses on world history, Middle East history, gender studies, and environmental history.



David Patterson is interested in the relationship between ecosystem change and mammalian evolution. I use a variety of methods including traditional paleontological analyses, stable isotope geochemistry, and ecometrics. I have active field and laboratory projects focusing on North American and African mammals ranging from the early Pleistocene to the modern.



Thomas Vogel is a faculty member in the Department of Physics and Astronomy.

3:30pm – Scientific Consensus

In order to make a real-world impact, a scientific discovery requires more than just overwhelming agreement among scientists in the field - it also requires effective communication to the public. How do scientists come to agree upon a scientific fact? How does the way in which this fact is communicated to the public affect how readily it is accepted by the general public? It takes more than just good science itself for a discovery to make an impact in society, and a simple misstep in science communication has the potential to stymie its societal benefits and generate misinformation. Our panel of experts will discuss the process through which scientists come to agreement, the crucial process of effective science communication to the general public, and why some people may reject scientific information and instead embrace misinformation and conspiracy theories.



Josh Cuevas is a professor of education at UNG with a PhD in Educational Psychology. His research interests focus on the field of cognitive psychology, including topics such as learning, memory, and evidence-based reasoning. He teaches courses in educational psychology, assessment, and research methodology. His recent work has examined how subjective beliefs and the cognitive traits associated with them are related to information processing and behaviors.



Royce Dansby-Sparks is a faculty member in chemistry at the University of North Georgia.



Bryan Dawson has a Ph.D. in Industrial/Organizational Psychology. He is currently working on projects investigating perceptions of gender, gender and ethnic discrimination and perceptions of video games. He routinely teaches courses related to statistics and I/O Psychology and serves as the coordinator for the interdisciplinary minor in leadership.



Abby Meyer came to UNG in August of 2015 immediately following the completion of her graduate work at the University of Memphis. She formed a precocious love of psychology and human behavior from a very young age, but later discovered her love of neuroscience and neural circuits of memory systems after surviving a harrowing car accident in 2004. Her lack of memories for this event and her subsequent neurorecovery led her to study the pathways and processes that govern memory systems. In graduate school, Dr. Meyer pursued the field of behavioral toxicology in an attempt to further discover the factors that hinder neurodevelopment, memory processes, and executive functioning. Her student-driven research lab at UNG is actively working to continue to uncover the important links between what the brain is, what factors disrupt neurodevelopment, and what the brain is capable of.



Margaret Smith has a variety of research interests in evolutionary biology, but her training has focused on the evolution of developmental mechanisms. At UNG, she is currently working with a very interesting insect system which is amenable to a variety of evolutionary, ecological, and developmental questions.

She works with the wasp *Copidosoma floridanum* which parasitizes moth eggs, which in her lab are either *Trichoplusia ni* or *Chrysodeixis includens* eggs. She studies *C. floridanum* because it has very interesting development. It is facultatively polyembryonic, meaning that from a single egg, thousands of genetically identical offspring develop. It is also a eusocial insect, meaning that among the thousands of genetically identical siblings, some individuals differentiate into sterile soldiers and others differentiate into reproductive individuals. She studies how and why the development of such a complex life history strategy evolved.

Currently a group of students in her lab group are working on understanding ecological factors influencing soldier development. She has also had students work with just the hosts, *T. ni* and *C. includens* which are crop pests. Students explored management strategies for *C. includens*, and there are also interesting questions to explore about the evolution of pesticide resistance. I collaborate on all of this work with Dr. Erin Barding. If you're interested in this system or these research areas, please stop by to chat!



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Family Activities (DSF 2021)

Submitted by dahlonegascience on Wed, 02/21/2018 - 19:13

Engage in science with the entire family at home through the 2021 Dahlonga Science Festival!

Please note that parents must accompany children for all events. At no time should unsupervised children be left to conduct activities alone.

Activities for kids and their families include:

- [Storytime with Scientists](#) on March 6 @ 10, 10:30, 11, and 11:30 am
- Lab in a Bag at-home experiments
 - [Order a pre-assembled kit of supplies here.](#)
 - Or find supplies yourself using the [Kids' Activity Supply List](#)
- Yoga Safari on March 6 @ 1:30, 3, and 4:30 pm

[See the full schedule of activities here.](#)



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[Home](#)

Virtual Activities Supply Lists

[REGISTER HERE](#) for all 2021 festival activities. Zoom links will be sent via email on the festival weekend.

This year, we're offering live-streamed, interactive activities as well as a Lab in a Bag (LAB) kit that contains all of the supplies that you and your family needs to do the activities! LAB kits are \$5 and can be [pre-purchased in our online store here](#) and picked up at a regional location around the North Georgia area.

If you and your family opt to obtain your own supplies, then don't worry, you can still engage with the activities! Here are the supplies below you'll need in order to do our 2021 festival activities. Please note that we're offering a wide-variety of activities, and there are several options that don't require any supplies. If you want to do our activities that require supplies, you can get a LAB kit or purchase your own supplies from the list below:

Lemon Juice Personality Test:

- 1 cotton swab (Q-Tip)
- One 4-inch piece of thread
- A marker
- A few drops of lemon juice

Marshmallow Bridge:

- One 10-ounce bag of mini-marshmallows
- 100 toothpicks

Fireworks in a Jar:

- A jar or small, clear container with at least one cup of water
- 3 tablespoons of vegetable oil
- A few drops of food coloring (different colors works best)

Paper Circuits:

- One sheet of printer paper
- At least 50cm of copper tape (more tape makes for longer circuits!)
- At least one small, individual 3-5mm LED light diode with two metal prongs
- 1 3volts cell battery

Density Tower:

- Clear container
- 30mL of corn syrup
- 30 mL of rubbing alcohol
- 30 mL of vegetable oil
- 30mL of dish detergent
- Transfer pipettes (these work best for layering the liquids)
- Small objects that can float; we recommend popcorn kernels, plastic and metal beads, and pieces of foam)
- These amounts will fill a standard or small glass container. If you want to make a bigger density tower, then just use more of each liquid item noted above! If you'd like to add

more layers to your tower, then you can add water, honey, maple syrup, and whole milk too!

Isolating DNA from Strawberries:

- Cup or glass (a skinnier container works best)
- 10mL rubbing alcohol
- 1 coffee filter
- 1 medium strawberry or about 1/3 of a banana (the more fruit you use, the more DNA you can get, but you'll need more solution to break down the cell walls if you use more fruit)
- 2 tablespoons dish detergent
- 1/4 teaspoon salt
- water
- sandwich bag for crushing up the fruit
- wooden stick or tweezers for getting the DNA

Imitation Lava Lamp

- A tall, clear container that can hold at least 50 mL
- 30mL vegetable oil
- One quarter (1/4) of an alka seltzer tablet
- 1 food coloring tablet



Dahlonga Science Council

Fun, informative, community-based science in Dahlonga!

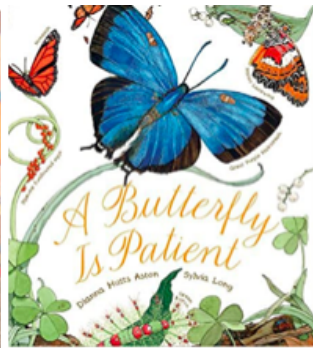
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Story Time with Scientists!

Our littlest scientists can join us for story time. Meet scientists studying the amazing natural world. Bring your curiosity to learn about animals, bugs, plants, and more!

[REGISTER HERE](#) to gain access to this fun and family-friendly activity. Zoom links will be sent via email on the festival weekend.

See the schedule of stories below. Best for ages 3 - 8 years. Check out the books at the [Lumpkin County Library](#) or simply follow along in the live-stream.

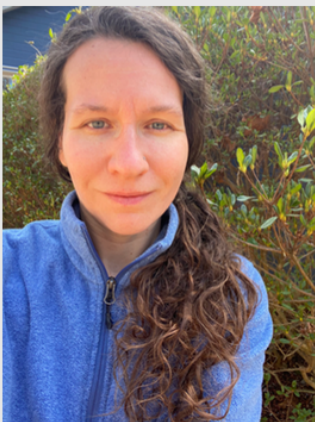


| Time | Book | Description |
|--|--|--|
| Saturday, March 6 th , 10 a.m. | <i>Underground</i> by Denise Fleming | Discover the down and dirty secrets of underground creatures. Scientist Emilia Sola Gracia will be our guide. |
| Saturday, March 6 th , 10:30 a.m. | <i>A Butterfly is Patient</i> by Dianna Aston | Celebrate the gorgeous world of butterflies with scientist Emilia Sola Gracia. |
| Saturday, March 6 th , 11 a.m. | <i>A Hundred Billion Trillion Stars</i> by Seth Fishman | Our world is full of constantly changing numbers. Scientist Karrie Ann Fadroski will help us make sense of the impossibly big and small. |
| Saturday, March 6 th , 11:30 a.m. | <i>Twilight Hunt</i> by Narelle Oliver | Strange creatures cleverly camouflage themselves to become invisible. Let's find them with scientist Karrie Ann Fadroski. |

Meet our scientists!



Dr. Emilia Sola Gracia got her PhD by working with zombie ants, trying to understand how ants interact with each other. After graduating, she started teaching at University of North Georgia to help students better understand biology.



Karrie Ann Fadroski became a scientist because it allowed her to learn more about critters she loves and gave her a "grown-up" excuse to spend lots of time outside. Her favorite things to do include digging in the dirt, learning about plants, and watching spiders. (She also really likes learning about stars with her kids.) She has taught at the University of North Georgia for fifteen years, and drags her students outside with her as much as possible.



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Planetarium Shows (DSF 2021)

Submitted by dahlonegascience on Wed, 02/21/2018 - 19:28

The [UNG Coleman Planetarium](#) is presenting a free, online planetarium show for this year's festival, available starting March 5th on the [Coleman Planetarium YouTube Page](#).

Starting FRIDAY, MARCH 5th

Wonder Women of Astrophysics

The study of stars, galaxies, planets and more has been shaped by scientists looking up at the night sky with wonder. Many of the most fundamental leaps forward in astronomy and astrophysics were lead by women. Join us to learn their stories and explore the skies that inspired them.

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[Merch, LAB kits, and Swag!! >](#)



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Merch, LAB kits, and Swag!!

Submitted by dahlonegascience on Wed, 02/21/2018 - 21:43

This year, the Dahlonga Science Council is pleased to offer a Lab in a Bag (LAB) kit to help you and your family engage in our interactive, live-streamed festival activities! These kits are filled with all the supplies you need to complete the activities throughout the weekend of the festival! Kits can be pre-purchased via our online store and will be available for pickup on Friday, March 5th from noon to 5pm on the UNG Dahlonga, Gainesville, and Cumming campuses. Pre-ordering the kits is recommended, as there are a limited number of kits available. LAB kits can also be purchased in person while supplies last at each pick-up location.

[**VISIT THE ONLINE STORE AT THIS LINK!**](#)

Also, check out our new DSF 2021 merch!

Because what kitchen cupboard and science festival is complete without an awesome mug!?!



[World Logo](#) has designed our theme-based art.

- Coffee Mugs [16oz - large capacity!]
 - \$15 each or 2 for \$25
 - Mug Combo - 2020 AND 2021 mug - \$20 for the set
- Magnetic Stickers
 - \$5.00 each

Cost for all items calculated WITH tax

[VISIT THE ONLINE STORE AT THIS LINK!](#)

Last year's festival shirt is still available for a discounted price!!



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[Up](#)

[Event Locations, Parking, & Map \(DSF 2021\) >](#)



Dahlongega Science Council

Fun, informative, community-based science in Dahlongega!

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2021 Raffle Prizes!

For this year's virtual festival, we're offering a chance to win one of many local community gift cards!

[REGISTER HERE](#) for all 2021 festival activities. Zoom links will be sent via email on the festival weekend.

There are multiple ways to win: earn an entry into our raffle when you register for our festival, and earn even more entries through social media! Share your experiences on social media as you and your family engage in our festival activities, and **use our #DahSciFest**. Every time you use our special festival hashtag, you'll get one entry into our raffle contest! Entries via hashtags can be earned on Instagram, Twitter, Facebook, and more! The more you tag, the more you could win!

The prizes that are available to win this year are:

\$25 gift card to Zaxby's



\$25 gift card to Starbucks



\$25 gift card to Walmart



\$25 gift card to Zaxby's



Picnic Bag and Gift Basket, donated by UNG Bookstore



UNG

\$25 gift card to the Picnic Cafe

UNIVERSITY of
NORTH GEORGIA™



\$25 gift card to Bourbon Street Grille



\$25 gift card to Shenanigans Irish Pub



Free personalized book selection from Bear Book Market



We are incredibly grateful for our local community partners for their contributions to this year's festival!

These businesses help us bring science education opportunities to our community; we couldn't do it without their help! We encourage all of our attendees at our Science Festival and our Science Cafes to patron these wonderful local businesses.



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Event Locations, Parking, & Map (DSF 2021)

Submitted by dahlonegascience on Sat, 02/24/2018 - 20:54

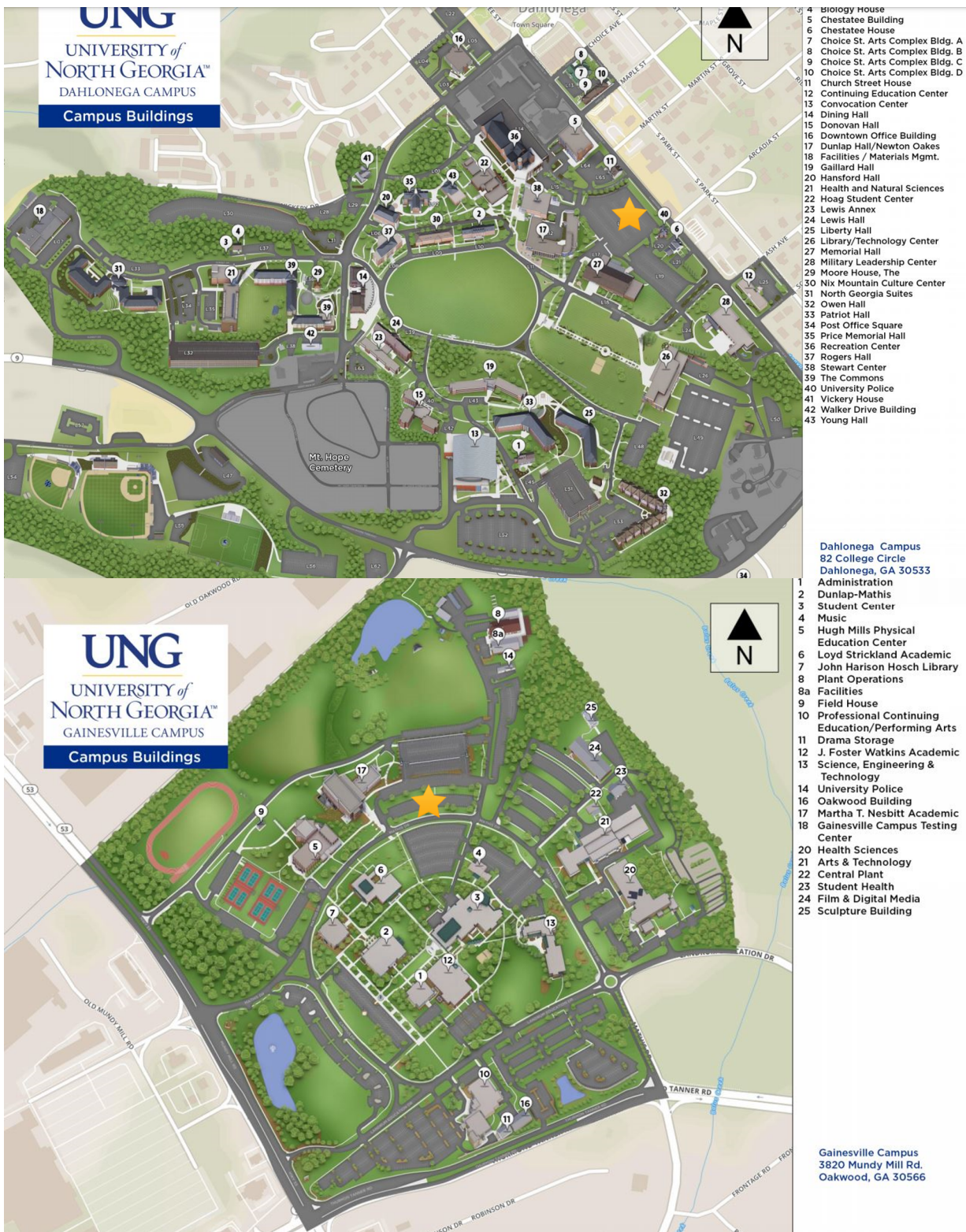
Ordinarily, the Dahlonga Science Festival is held in many different venues all around Downtown Dahlonga. However, due to COVID concerns this year, we will be hosting an entirely virtual festival in 2021.

[REGISTER HERE](#) for all 2021 festival activities. Zoom links will be sent via email on the festival weekend.

Our panel presentations, speakers, kid's activities, planetarium shows, and more will all be available online via Zoom and Facebook Live! Register today to gain access to these events.

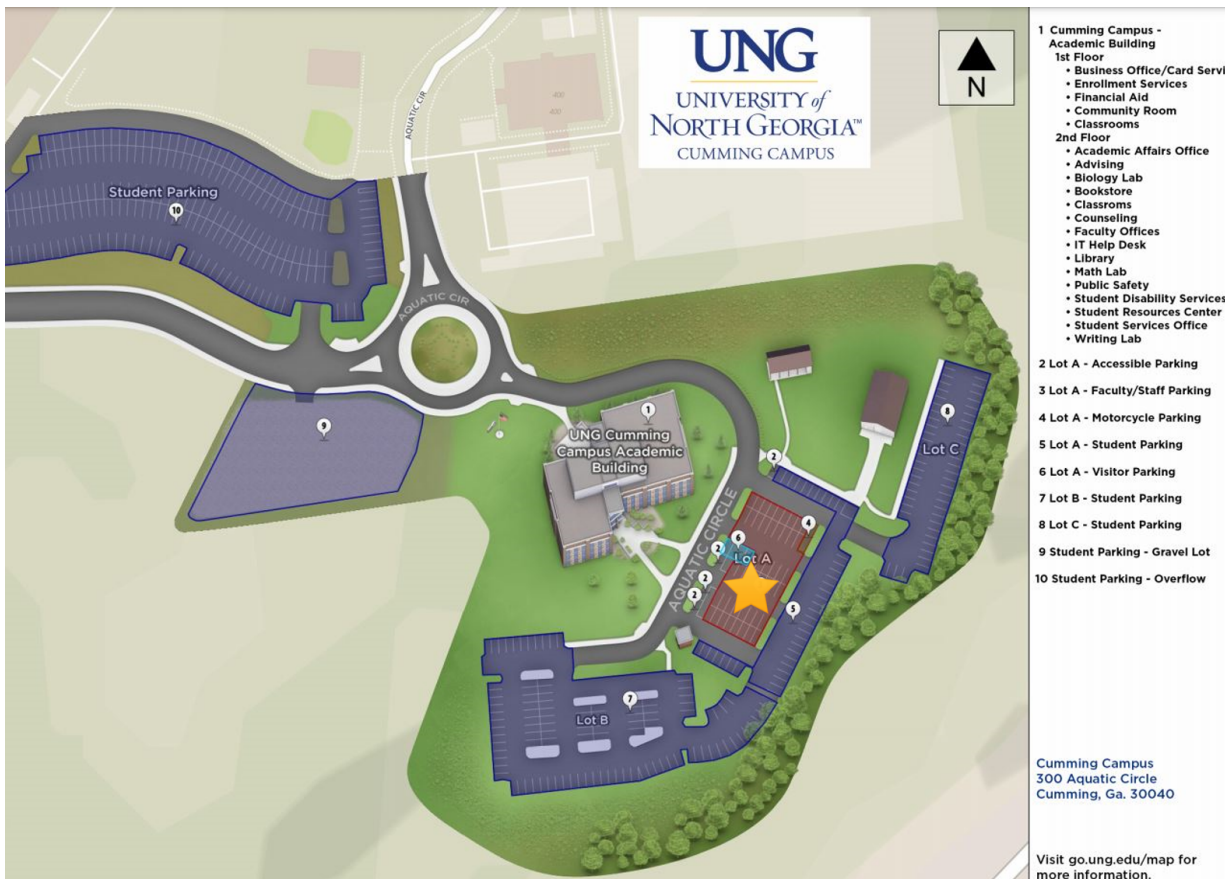
Be sure to stop by one of our pickup locations on Friday, March 5th to get your Lab in a Bag (LAB) kit! We'll be stationed at the UNG Dahlonga, Gainesville, and Cumming campuses for the LAB kit pickup!

We're getting oh so close to this year's event; check out our plans thus far, and keep an eye out for more information coming soon!



In the meantime, check out some of our previous locations hosting events for DSF 2020 below:

The Dahlonega Science Festival is a community event, held in local businesses and facilities. We also utilize special facilities on the UNG campus, such as the Health and



Natural Science Building where the UNG Planetarium is housed. Parking is available for the event not only in Dahlonega, but on the UNG Campus for free Friday after 3:00 p.m. and all weekend (including student, visitor, and F/S parking spots). The map below shows the location of the activities for this year's festival.

