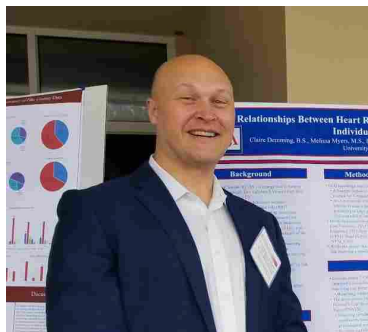




Newsletter of the Alabama Academy of Science

100th Annual Meeting Special Edition

Executive Director's Corner



Hello and Happy 100th Anniversary Celebration! It has been an amazing year for the Alabama Academy of Science, and this newsletter highlights so many of our first, new achievements, and initiatives. I first began working with the AAS in 2016, and by 2017 I was the local arrangements chair for the University of South Alabama's historic meeting with E.O. Wilson as our honored guest and keynote speaker (Thanks to Tom Meyer!). I became immediately aware of the history, and potential, of the AAS as Alabama's Oldest Science Organization. In a world where there are so many disciplinary science organizations for Biologists, Chemists, Psychologists, Physicians, and everyone in between, why would we have a state level science organization?

The bottom line is that if we, as educated people, do not support our current scientists they will move away. If we do not intentionally build the next generation of scientists, they will not magically appear. The key to a strong today and a bright future is **mentoring**. That is what AAS is really all about. From the outstanding work of Virginia Vilardi with the Alabama Science Fair, Mary Lou Ewald at Auburn University, and her team with Science Olympiad and so much more, to Mark Jones with Alabama Junior Academy of Science (AJAS), we develop middle and high school students through a network of mentoring and competitions. Mentors such as Sami Raut engage undergraduate students in research. With our student research awards we provide supplemental funding to undergraduate students who are engaged in original research. Our faculty and fellows mentor hundreds of students across the state of Alabama each year! Last year alone, over 100 undergraduates and graduate students presented original research at our annual meeting. Senior faculty are recognized for outstanding scholarship, mentoring, and lifetime achievement. For the 100th Anniversary, we initiated a new AAS Award, the Dr. Adriel D. Johnson, Sr. Mentoring Award, with inaugural recipients Dr. Sami Raut, University of Alabama at Birmingham, and Dr. Virginal Vilardi, Wetumpka High School.

We really make a difference, and I want you to be proud of being an AAS member!

Are you passionate about promoting science and the next generation of scientist?

Get involved! You can fill out this form to let us know about your interest in the organization and to learn about leadership and volunteer opportunities: <https://forms.gle/videXkkX13nEjWCj9>

Thanks and I look forward to hearing from you!

Jack Shelley-Tremblay
jstremblay@southalabama.edu
251-460-6883

This 100th Anniversary Newsletter showcases the events of our 100th Meeting, held in Birmingham at Samford University. Thanks to the Local Arrangements Committee, Sponsors, and all those who attended, presented their work, and shared appreciation for the opportunities we have to grow in and contribute to science in Alabama.

The 100th Meeting of the Alabama Academy of Science Wednesday Night Celebration Vulcan Museum & Park, Birmingham

Notable Officers – Past & Present



Twelve Past Presidents gathered for the Celebration! L->R Mickie Powell, Brian Burns, Ron Hunsinger, Ken Marion, Cameron Gren, Larry Davenport, Brian Toone, Emanuel Waddell, Adriane Ludwick, Jack Shelley-Tremblay, Ellen Buckner, Ketia Shumaker.

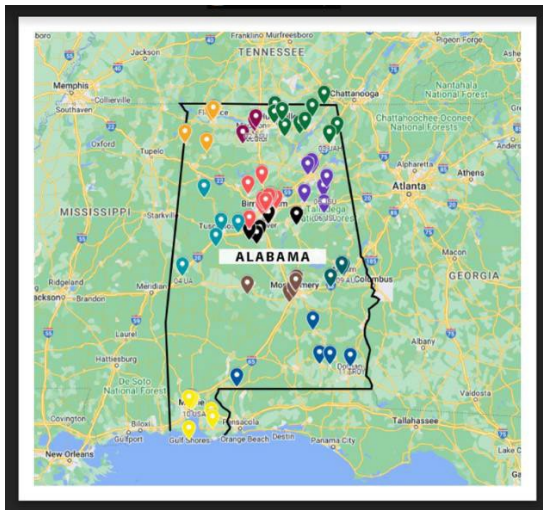
Current Executive Committee: L-R Back Row Clark Lundell (Chair Section X. Bioethics, Philosophy & History of Science), Vinoy Thomas (President-elect), Ken Marion (Chair Trustees and Chair Finance), Brian Burns (Resolutions), Jack Shelley-Tremblay (Exec. Director), Mark Caulkins (Chair Section IX. Health Sciences); Larry Krannich (Trustee), Matthew Edwards (Associate Exec. Dir and Trustee); L->R Front row – Brian Toone (Editor, JAAS), Bettina Riley (Treasurer), Mickie Powell (Mason Fellowship Committee), Sami Raut (Chair Section VIII STEM Education), Ellen Buckner (Chair Gorgas Scholarship Competition & Trustee). Not pictured – Jeff Morris (President).



100th Anniversary Project - The Alabama Science Trail



The Alabama Science Trail Team including L-> R: David Luthin (Boy Scouts Liaison), Kit Killingsworth (Girl Scouts Liaison), Donna Cleveland (Committee Member), Cameron Gren (Committee Member), Nora Whitten (Founding Researcher/Creator for the Trail's Database and Maps). Not pictured - Mel Blake (Committee Chair and Passport Program Coordinator), Ellen Buckner (100th Chair).



The Alabama Science Trail was founded in 2018 as an outreach for science engagement by student groups, Scout Troops and families across the state. The trail includes almost 100 sites with scientific and educational value. It was brought to fruition as a 100th anniversary project with the addition of the Passport Program. The trail can be found at <https://www.alabamaacademyofscience.org/alabama-science-trail/>.

100th AAS Meeting Award Recipients
Prakash Sharma & Matthew Edwards Committee Co-Chairs

Wright A. Gardner Award for Lifetime
Achievement in Science in Alabama
Dr. Larry Krannich
Dr. Martha Varghese (not pictured)



Emmett Carmichael Award for Outstanding Article
Journal of the Alabama Academy of Science
Ping Zhao & team from University of North Alabama



Fellows of the Alabama Academy of Science
Donna Cleveland, University of South Alabama



Dr. Bettina Riley, University of South Alabama



Dr. Clark Lundell, Auburn University



Dr. Adriel D. Johnson, Sr. Mentoring Award

Initiated in this 100th Anniversary Year to honor the legacy of Dr. Johnson who “mentored everyone” – students, faculty, and community youth.
Pictured: Drs. Ellen Buckner & Emanuel Waddell, Dr. Jacqueline Johnson



Inaugural Recipients

Dr. Sami Raut, University of Alabama at Birmingham
Dr. Virginal Vilardi, Wetumpka High School



Distinguished Service to the Gorgas Scholarship Program Art Beattie, Alabama Power Foundation



Commendations by the Alabama Legislature and National Association of Academies of Science for 100 Years of Leadership of Science in Alabama



Brian Burns, Resolutions Chair



NAAS

NATIONAL ASSOCIATION OF ACADEMIES OF SCIENCE

A Resolution in Recognition of 100 Years of Distinguished Service by the Alabama Academy of Science

Whereas, the Alabama Academy of Science began meeting in 1924 and has since met annually to support the sciences in the State of Alabama;

Whereas, the Alabama Academy of Science hosts annual meetings which are the only general science meetings in the State of Alabama, bringing together scientists, teachers, and students in all fields for increased cooperation and fellowship among its members;

Whereas, the Alabama Academy of Science publishes the Journal of the Alabama Academy of Science, now in its 91st volume, consisting of peer reviewed articles from researchers or research located in Alabama or immediately surrounding areas;

Whereas, the Alabama Academy of Science renders public service in scientific matters; through public policy engagement, curriculum consultation, science education, collaboration, mentorship, and support of student achievement

Whereas, the Alabama Academy of Science supports and organizes the Alabama Junior Academy of Science, the Gorgas Scholarship Competition, Science Fairs and Science Olympiads to promote the interest in and study of science by the youth of Alabama; and participates in national competitions including ISEF, JSHS, and Science Olympiad.

Whereas, the Alabama Academy of Science provides for and awards scholarships to deserving young scientists of Alabama; connecting with additional scholarships offered through Alabama Colleges and Universities.

Whereas, the Alabama Academy of Science is and has been an active member of the National Association of Academies of Science and the American Association for the Advancement of Science.

Now, therefore, be it resolved, that the National Association of Academies of Science honors and recognizes the Alabama Academy of Science for 100 years of outstanding service to the people of Alabama.

History Book 100th Anniversary Project Created by
Jeff Morris, Matthew Edwards, Virginia Vilardi
Digital Version Available on Website
www.alabamaacademyofscience.org/100th-anniversary-history-book/

AAS 100th Anniversary History



Thanks Student Assistants from Council Undergraduate Research
in Mathematics, Kwadwo Antwi-Fordjour, Faculty Advisor

Welcome Student Assistants

Center for
Undergraduate
Research Mathematics
(CURM) is funded by
the National Science
Foundation (NSF) DMS
1722563

Alabama Academy of
Science 100th Meeting

Sarah Westmoreland
Kendall Bearden
Dylan Lee
Zach Overton
Dr. Kwadjo Antwi-Fordjour



Thanks to our 100th Anniversary Meeting Sponsors



100th Anniversary Sponsors

Diamond Sponsor

- The Broadcom Foundation

Gold Sponsors

- Ellen & Richard Buckner
- Dr. Wayne Finley
- Creative Polymer Solutions, LLC.

Silver Sponsors

- Mitzi Adams
- Donna Cleveland
- Emanuel and Karol Waddell
- The E.O Wilson Foundation
- Southern Research Institute

Donors

- Matthew Edwards
- Ariane Ludwick
- Sami Raut
- Ping Zhao



Dr. Wayne Finley: "Thanks to all those participating in this 100th AAS Meeting!"

Thursday – Senior AAS Meetings of Sections College of Health Sciences, Samford University



Group Photo of 100th Anniversary Attendees



**Plenary Panel: *“The Science of Health Disparities Research”*
Samford Health Economics & Outcomes Research Group (HEOR)**

Pictured L->R:

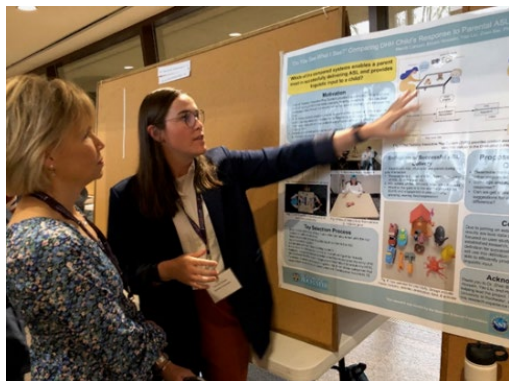
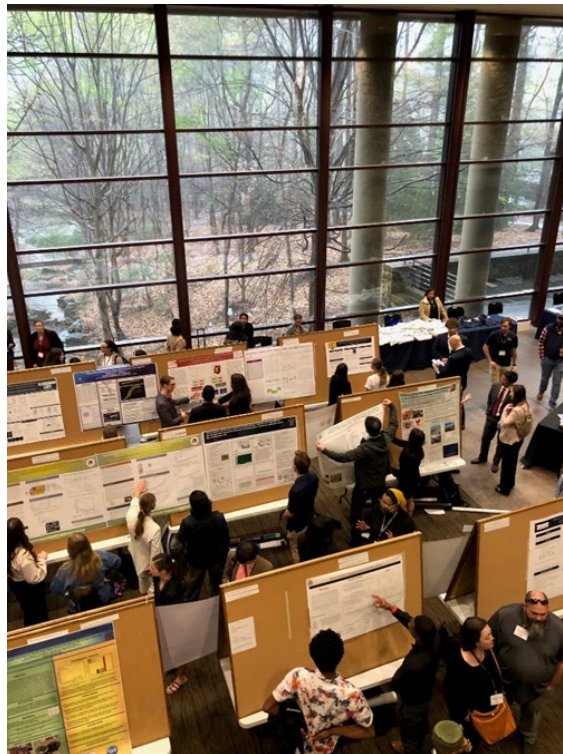
- Lakesha Kinnerson (School of Public Health)**
- Courtney Spells (Moffett & Sanders School of Nursing)**
- Cheryl Cropp (McWhorter School of Pharmacy), Moderator**
- Georges Adumlin (McWhorter School of Pharmacy)**
- Lan Bui (McWhorter School of Pharmacy)**
- Andrea Bowens (School of Health Professions)**
- Rachel Bailey (School of Public Health)**

Senior Academy Sections

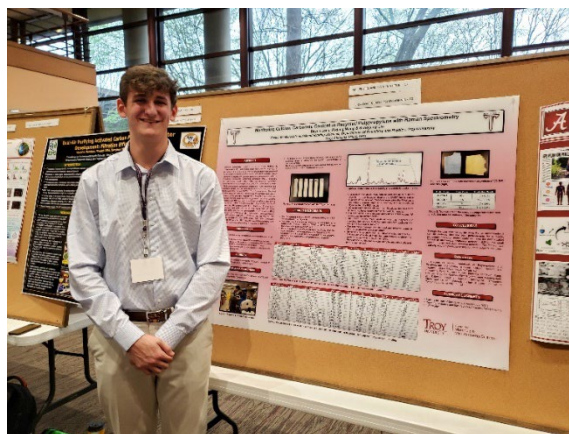
- SECTION I. Biological Sciences
- SECTION II. Chemistry
- SECTION III. Physics and Mathematics
- SECTION IV. Engineering and Computer Science
- SECTION V. Social Sciences
- SECTION VI. Anthropology
- SECTION VII. STEM Education
- SECTION VIII. Environmental and Earth Science
- SECTION IX. Health Sciences
- SECTION X. Bioethics & History & Philosophy of Science

Special Sections for 100th Anniversary

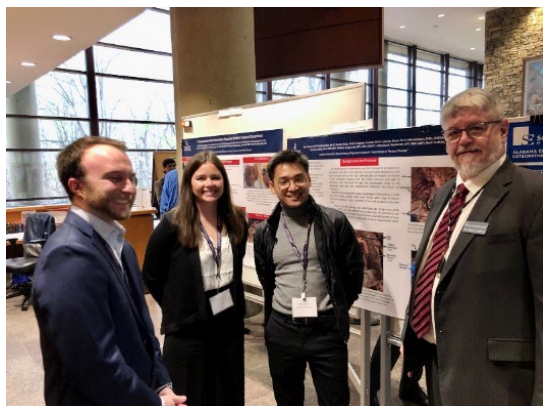
- SPECIAL A. Alabama Honors Scholars
- SPECIAL B. Material Science and Engineering Graduate Students Symposium
- SPECIAL C. Neuroscience
- SPECIAL D. Society of Physics Students



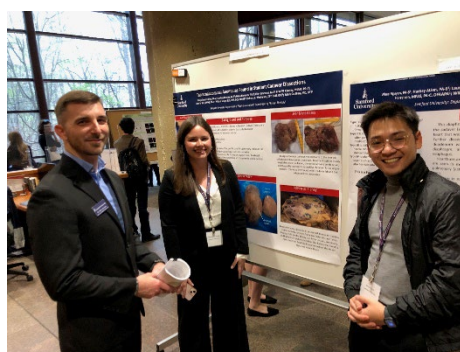
Merritt Cahoon, Samford University
Section IX: Health Sciences



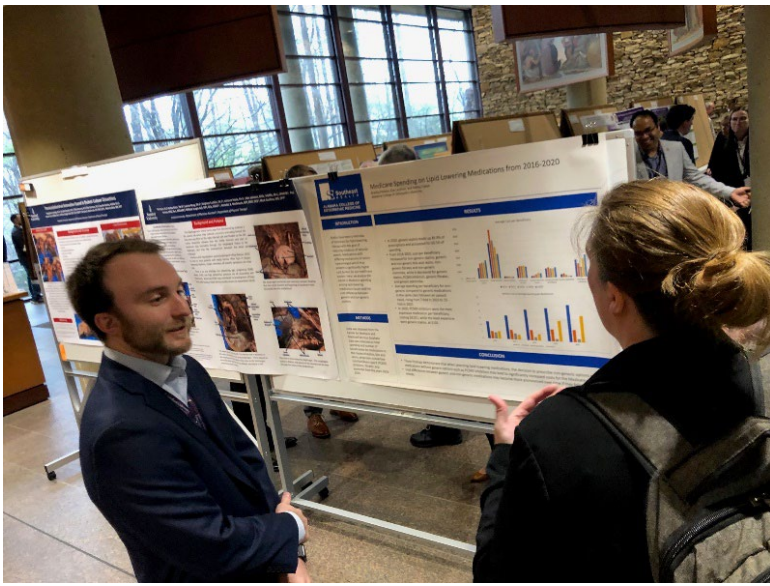
Dayne Long from Troy University, poster in
Section VIII. Environmental and Earth Science.



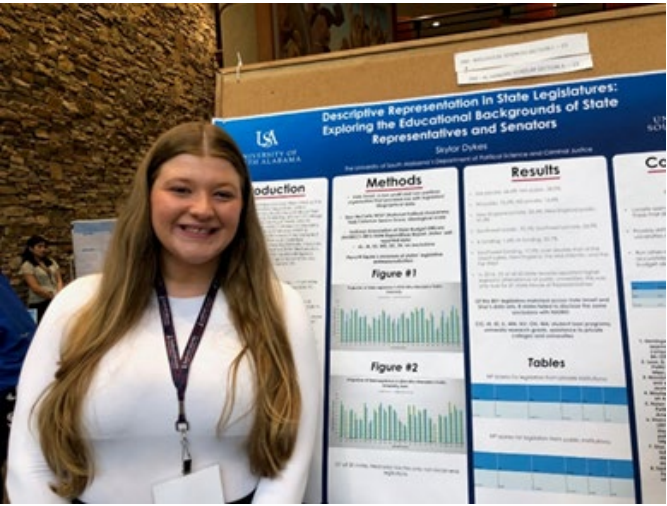
Students of Drs. Wes Johnson, & Mark
Caulkins, Samford University, Section IX.
Health Sciences.



Poster Sessions held in the lobby of
the College of Health Sciences,
Samford.



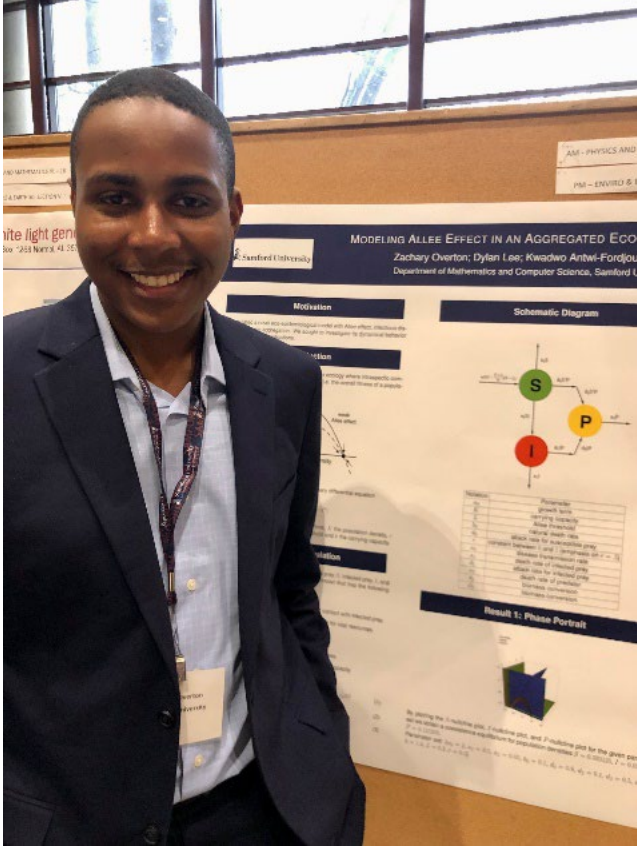
Bradley Perkins, Alabama College of Osteopathic Medicine, presents his poster in Section IX. Health Sciences.



University of South Alabama Undergraduate Honors Students presented in the Special Section: Alabama Honors Scholars.



Delegation from Alabama A&M University, Section II. Physics & Mathematics



Zach Overton, Samford CURM Math Scholar, presents his poster to Section II. Physics & Mathematics



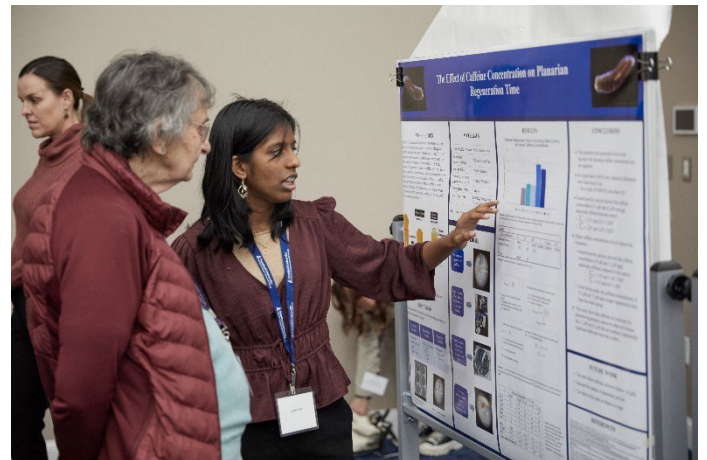
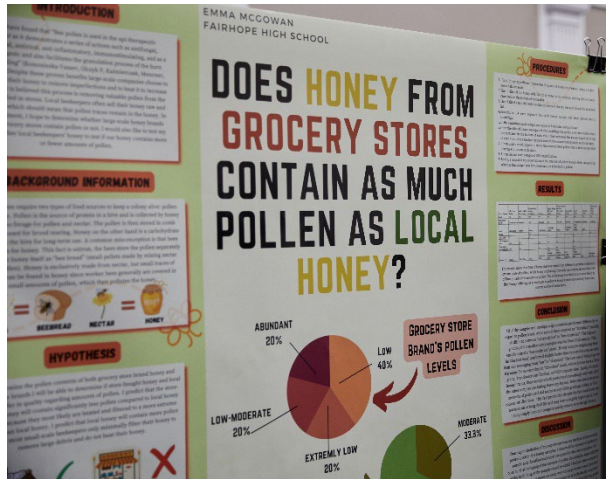
Sloan Almekhmi, UAB, Section V, STEM Education

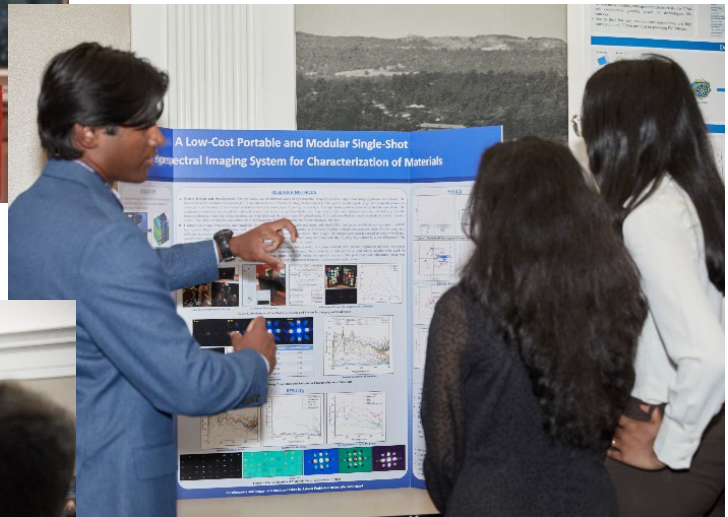


Section X, Bioethics & History & Philosophy of Science
Dennis Sansom, Samford University, Ellen Buckner, Samford University, James Bradley, Auburn University, Kevin Jones, Auburn University, Clark Lundell, Auburn University, Bettina Riley, U. South Alabama.



Thursday Evening - Sci-Mix, Alabama Junior Academy of Science & Gorgas Posters





Thursday Night Joint Banquet - AAS/AJAS/Gorgas

Dr. Jack Shelley-Tremblay,
Executive Director,
Welcomes the 100th
Anniversary Attendees



Senior Associate Provost Dr.
Marci Johns welcomes the
AAS to Samford University



Samford Associate Provost for
Student Success and Diversity,
Associate Professor of
Chemistry and Biochemistry,
Dr. Denise Gregory reconnects
with mentor, Dr. Adrienne
Ludwick, Tuskegee University



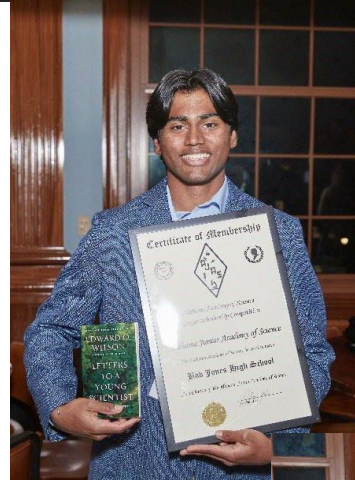
Dr. Arrix Ryce, Emory University School of
Medicine & Family; the First African American
Winner Gorgas Scholarship Competition.
Ellen Buckner, Gorgas Chair



Mason Teacher Fellowship Recipient,
Ms. Kelsey McGraw, University of
South Alabama & Mickie Powell,
Mason Teacher Fellowship Chair

Recognition of Alabama Junior Academy of Science Chapters

Alabama School of Fine Arts
 Auburn High School
 Auburn Junior High School
 Baker High School
 Bob Jones High School
 Daleville High School
 Elmore County High School
 Fairhope High School
 Greene County High School
 Hoover High School
 Indian Springs School
 James Clemens High School
 Jefferson County International
 Baccalaureate School
 Key Destiny Homeschool
 Libertas Classical Community
 Locust Fork High School
 Monroe County High School
 Northridge High School
 Providence Classical School
 Wetumpka High School





Friday State Finals

Alabama Junior Academy of Science

Junior Science & Humanities Symposium

Gorgas Scholarship Competitions



Alabama Junior Academy of Science
2023 Participants State Finals



AJAS Winners. Pictured with Dr. Virginia Vilardi, State Science Fair Director and Inaugural Recipient of the Adriel D. Johnson, Sr. Mentoring Award



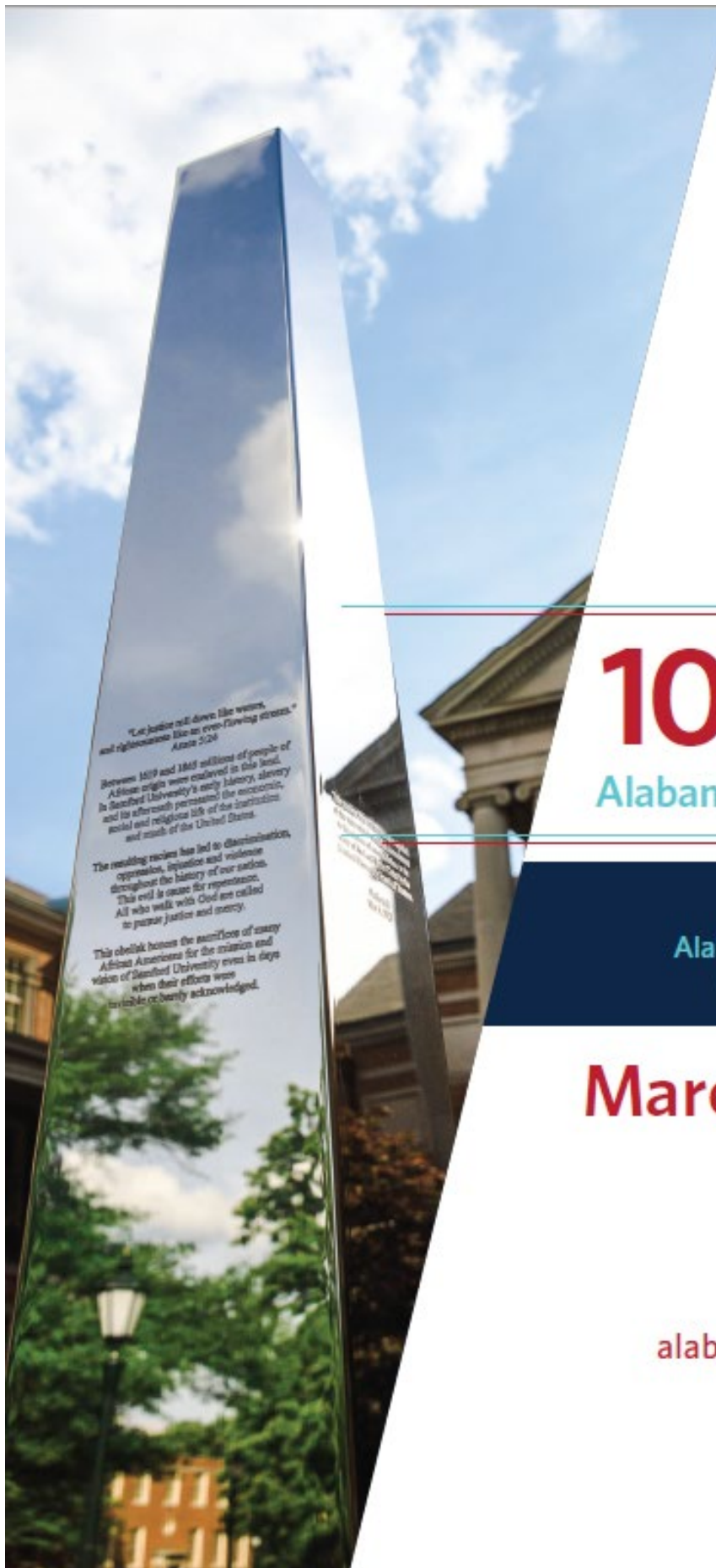
2023-2024 AJAS Officers: Presidents: Abbey Gobbels, Hoover, Levi Gels, Hoover
Vice Presidents: Aanchal Behara, ASFA, John Belew, Wetumpka
STEMM officers: Kevin Yan, Auburn, Will Baoi, Auburn, McNair Shah, ASFA
Dr. Mark Jones, AJAS State Director



Gorgas Winners with Dr. Buckner, Gorgas Chair



Gorgas Finalists 2023: Back Row L -> R: Jacob Norrell, Wetumpka High School; Daniel Zhao, Alabama School of Fine Arts; Ryan Debrow, Alabama School of Fine Arts; Naeim Mahjouri, Auburn High School; Ashwin Prabhakar, Bob Jones High School; Front Row L-> R: Eshika Kudaravalli, Hoover High School; Shreya Sunil, James Clemens High School; Sanjana Chada, Alabama School of Fine Arts; Emma Kuehl, Fairhope High School; Anna Bekah Cress, Libertas Classical Community School; Emma McGowan, Fairhope High School; Mayu Nakano, Indian Springs School (not pictured).



"Let justice roll down like waters,
and righteousness like an ever-flowing stream."
Amos 5:24

Between 1619 and 1865 millions of people of
African origin were enslaved in this land.
In Samford University's early history, slavery
and its aftermath permeated the economic,
social and religious life of the institution
and much of the United States.

The resulting racism has led to discrimination,
oppression, injustice and violence
throughout the history of our nation.
This evil is cause for repentance.
All who walk with God are called
to pursue justice and mercy.

This obelisk honors the sacrifices of many
African Americans for the mission and
vision of Samford University even in days
when their efforts were
invisible or barely acknowledged.



100th Annual Meeting

Alabama Academy of Science

Meeting jointly with
Alabama Junior Academy of Science
Gorgas Scholarship Competition

March 8-10, 2023

hosted by
Samford University
College of Health Sciences
Birmingham, Alabama

alabamaacademyofscience.org

