GEORGIA ACADEMY OF SCIENCE

ANNUAL MEETING

March 7th–8th, 2025

Young Harris College

Program

CONTENTS

Saturday's Sessions

THE GEORGIA ACADEMY OF SCIENCE

Supporting the Physical, Environmental, Social, Biological, and Medical Sciences

February 10, 2025

Dear Members of the Georgia Academy of Science and guests,

Welcome to the 2025 annual meeting of the Georgia Academy of Science, held on the beautiful campus of Young Harris College. I want to express my gratitude to everyone who has contributed to making this event a success. A special thanks goes to Paul Arnold, Jennifer Schroeder, Linda Jones and the entire dedicated team at Young Harris for their hard work in organizing this year's meeting. It promises to be both enriching and inspiring.

This year's meeting offers some special highlights, including many oral and poster presentations across our 9 sections. Additionally, I am excited to hear from our keynote speaker on Friday evening, Dr. Bonnie Baxter of Westminster University, Utah. She will talk about her exciting work on the extreme microbiology of the Great Salt Lake in Utah.

This wonderful meeting reflects the Academy's ongoing commitment to advancing science and fostering collaboration throughout the state of Georgia. It has been an honor to serve as President for a second year. I look forward to seeing what the future holds as I pass the presidency to Dr. Al Mead.

Margaret Smith

Margaret Smith

President, Georgia Academy of Science

March 7, 2025

Young Harris COLLEGE EST. 1886

Dear GAS Membership:

I am very pleased to welcome the members of the Georgia Academy of Science to Young Harris College for your 2025 annual meeting. We have been busy preparing for this great occasion, and I would specifically like to thank the local arrangements committee and faculty & staff of the College for making this meeting possible.

Science is an important component to the liberal arts environment, and Young Harris College is committed to nurturing its development in any way that it can. The Georgia Academy of Science is not only an important organization that fosters scientific research, exchange and collegiality in this great State of ours, but it is also an important part of the learning experience for many undergraduate and graduate students as they go down the road to being top-notch practitioners in the art of Science. In addition, GAS is an important mouthpiece to champion the sciences to the public and political sector of the State of Georgia. I applaud your efforts to keep the torch of science burning at a time when scientific literacy sometimes takes a back seat to other factors of political motivation.

Founded in 1886 by a circuit-riding Methodist minister, Young Harris College has a long history of training students, including scientists, in the context of a liberal arts environment. In 2009, YHC made the transition from a 2-year to a 4-year college, with the hopes of having even a greater impact on the academic culture of the state of Georgia. Since that transition, the College has nearly doubled its enrollment and greatly increased the number of new faculty. The sciences have been a big part of that growth, and our graduates can now be found in a multitude of quality graduate programs and careers. The emphasis of undergraduate research has been a large part of YHC's increasing success, and the faculty of Young Harris College work tirelessly with students in order to make sure that they have the necessary skills to navigate the rigors of the scientific world. In addition to their superb teaching, our faculty also are actively engaged in their disciplines through their own professional endeavors and scientific contributions.

It is my wish that you have a rewarding and productive conference here in the "Enchanted Valley"!

Sincerely,

John W. Wells, Ph.D.
President, Young Harris College

OFFICE OF THE PRESIDENT
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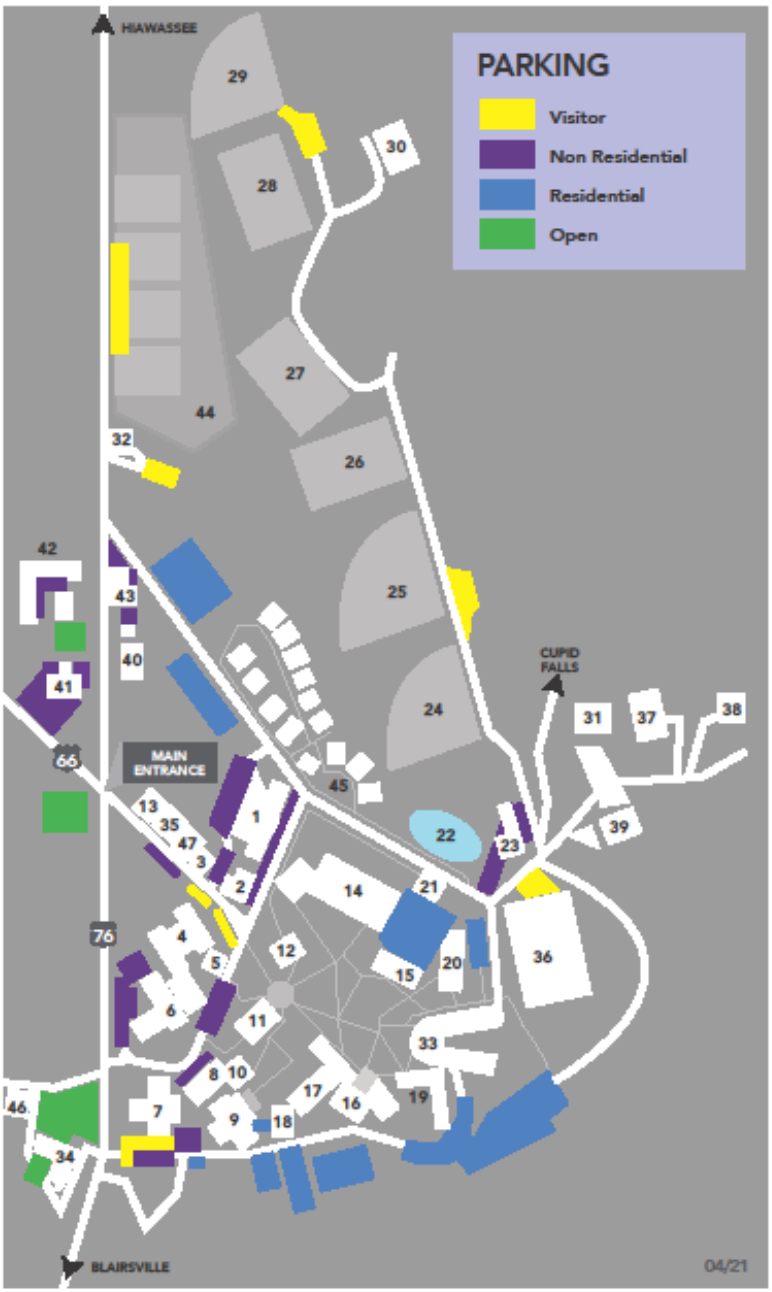
phone 706.379.5137 • 800.241.3754 • www.yhc.edu

Young Harris COLLEGE
EST. 1886

CAMPUS MAP



1 Maxwell Center, Math & Science
2 Pruitt-Barrett Adminstrative Offices
3 Offices
4 Clegg Fine Arts Center
5 Hesed House
6 Goolsby Center, Humanities
7 Sharp Memorial UMC
8 Duckworth Hall
9 J. William & Elizabeth Robinson Hall
10 Offices
11 Sharp Hall, President & Administrative Offices
12 Susan B. Harris Chapel
13 Post Office
14 Rollins Campus Center
15 Hillgrove Hall
16 The Towers Residence Hall
17 Appleby Center Residence Hall
18 Appleby West Residence Hall
19 Rollins Residence Hall
20 Manget Residence Hall
21 Physical Plant
22 Pond
23 Athletic Training Facility
24 Softball Field
25 Baseball Field
26 Soccer/Lacrosse Field
27 Practice Field
28 Whitehead Field
29 Intramural Field
30 Grounds Department
31 Beetle Laboratory
32 Berry House/Tennis Center
33 Enotah Residence Hall
34 Fine Arts Annex
35 Campus Gate Gallery
36 Recreation Center
37 Outdoor Leadership
38 Offices
39 Offices
40 Adams/Galloway House, Mathematics
41 Offices
42 Athletic Offices
43 Brown Building/ICL Classroom
44 Nichols Tennis Complex
45 The Village Student Residences
46 Band Building
47 Communications Studies Offices

GAS 2025 PROGRAM

Friday, March 7, 2025

12:00 pm to 6:00 pm: On-site Registration……Main Lobby, Rollins Campus Center (RCC)

2 pm to 3:30 pm: Georgia Academy of Science Board of Directors business meeting closed to the public ……Room 258, 2nd Floor RCC

3:30 pm to 4:00 pm: Poster Set-up …. Suber Banquet Hall & Lobby, Rollins Campus Center

4:00 pm to 5:30 pm: Poster presentations, refreshments served ……Suber Banquet Hall, Rollins Campus Center

5:45 pm to 6:00 pm: Opening remarks, Dr. Margaret Smith and YHC President John Wells……Suber Banquet Hall, Rollins Campus Center

6:00 pm to 6:15 pm: Break

6:15 pm to 7:15 pm: Keynote lecture by Dr. Bonnie K. Baxter……Suber Banquet Hall, Rollins Campus Center

Great Salt Lake: From Earth to Mars

Bonnie K. Baxter, Ph.D. is a Professor of Biology and Director of Great Salt Lake Institute at Westminster University, which focuses on collaborative research and community connections. Dr. Baxter researches the lake's extreme microbiology, especially the foundation of the ecosystem-the algae and cyanobacteria that feed the brine shrimp and flies. She has published a trove of scientific articles on the lake's extreme biology, the first academic book on the biology of Great Salt Lake, and the first children's book about this lake. Dedicated to public speaking, Dr. Baxter has become a "spokescientist," explaining the water crisis at the lake to government representatives, the media, and the community.

7:30 pm and 8:15 pm: Planetarium Showings……Rollins Planetarium, Maxwell

(*Tickets required, one per attendee provided with registration*.)

Saturday, March 8, 2025

7:30 am to 8:30 am: Light breakfast.....Maxwell Lobby

7:30 am to 9:30 am: On-site Registration Main Lobby, Rollins Campus Center (RCC)

8:00 am to 12:00 pm: Oral presentations/Section Business Meetings

Section I: BIOLOGICAL SCIENCES.....Room 107 Maxwell

Section II: CHEMISTRY.....Room 113 Maxwell

Section III: EARTH AND ATMOSPHERIC SCIENCES.....Room 106 Maxwell

Section IV: PHYSICS, MATHEMATICS, COMPUTER SCIENCE, ENGINEERING AND TECHNOLOGY.....Room 116 Maxwell

Section V: BIOMEDICAL SCIENCES.....Hatcher Room (Room 108) RCC

Section VI: PHILOSOPHY AND HISTORY OF SCIENCE.....Room 117 Maxwell

Section VII: SCIENCE EDUCATION.....Room 258 RCC

Section VIII: ANTHROPOLOGY.....Room 109 Maxwell

Section IX: PSYCHOLOGICAL SCIENCE....Student Senate Chamber (Room 203) RCC

12:00 pm to 1:00 pm: Lunch..... Suber Banquet Hall, Rollins Campus Center

1:15 pm to 2:00 pm: Student awards and Academy Business Meeting
....Suber Banquet Hall, Rollins Campus Center

SATURDAY PAPER PRESENTATIONS

***Denotes student presenter**

****Denotes student research in progress**

Section I: Biological Sciences

Maxwell Center, Room 107

Thomas Hancock, Presiding

Biological Sciences Presentations

8:15 am
RELATIONSHIP OF CHAIN-FORMING ARAPHID DIATOM COMMUNITIES FOUND IN HYDROLOGICALLY VARIABLE WETLANDS
Anna L. Agi, Checo Colon-Gaud, and Kalina Manoylow*

8:30 am
SEASONAL CHANGES IN THE GROSS ANATOMY AND HISTOLOGY OF THE OVIDUCT IN AN OVIPAROUS LIZARD, *SCELOPORUS UNDULATUS*
Elizabeth L. Durham and Matthew R. Milnes*

8:45 am
USE OF FLUORESCENT POWDER AS A MARKING METHOD ON MILLIPEDES
Sydney Irons and Bruce Snyder*

9:00 am
IMPACTS OF ENVIRONMENTAL CONDITIONS ON PHYTOPLANKTON ASSEMBLAGES IN LAKE LOUISE GEORGIA**
Daniel Kwawuvi and James A. Nienow*

9:15 am
MACROINVERTEBRATES AND STREAM HEALTH
Savannah Ledbetter and Debra Dooley*

9:30 am
MICROBIAL GROWTH ON POLYETHYLENE PLASTIC FROM 2 DIFFERENT LOCATIONS IN A WETLAND ENVIRONMENT
Waylin Boyd and Debra Dooley*

10:00 – 11:00 am Section Business Meeting

Biological Sciences Posters (will be displayed Friday 4:00–5:30 pm)

1. ALLOMETRIC GROWTH IN THE EASTERN BOX TURTLE, TERRAPEN CAROLINA CAROLINA
   Helen E. Adams, Natalie Hyslop, and Jennifer Mook*

2. DETERMINING THE UPPER THERMAL LIMITS OF THE WHITE TUBERCLED CRAYFISH (PROCAMBARUS SPICULIFER, LECONTE 1856)**
   Elias J. Aufderheide and David A. Weese*

3. STREAM CHARACTERISTICS AND MACROINVERTEBRATE MONITORING THROUGH SEASON CHANGE**
   Carson Becerra and Jennifer A. Fortunato*

4. EFFECT OF TREMATODE METACERCARIAL INFECTION ON LOCOMOTION BY LARVAL SALAMANDERS IN NORTHEAST GEORGIA
   Addie Bowen, Alexia Vaca-Nava*, and Carlos D. Camp*

5. INVESTIGATING SAPROPHYTIC DIVERSITY IN WEST GEORGIA UTILIZING DNA BARCODING
   Christiana M. Gleissner, Ashley I. Kidd*, and Frank Fontanella*

6. INVESTIGATING THE SYNERGISTIC EFFECT OF CITROSPET, CITRICIDAL, CAPRYLIC ACID, CARVACROL, LACTIC ACID AND HIGH-PRESSURE PROCESSING AGAINST *STAPHYLOCOCCUS AUREUS* AND *LISTERIA MONOCYTOGENES*
   Md Niamul Kabir, Romona McLeod, Laila Dowdy*, Shohana Huq, and Olabisi O. Ojo*

7. HUMAN ACTIVITY LEVELS NEAR MONITORED SECONDARY CAVITY NESTING FOREST BIRD BOXES BEFORE AND AFTER CONSTRUCTION OF A HOUSING COMPLEX**
   Kadan R. Martin and Dawn E. W. Drumtra*

8. EVALUATION OF MYOGLOBIN LEVELS IN THE LOCOMOTER MUSCLES OF FLORIDA MANATEES
   Cori N. Newton, Jenna R. Brown, Naneshka Rodriguez*, and Kaelb Lopez-Cruz**

9. BEHAVIORAL ECOLOGY AND DIETARY PREFERENCES OF *GAMBUSIA AFFINIS* IN A LABORATORY SETTING
   Aldo Madrigal Olivarez, Keishona D. Gordon*, and Emily Rose*

10. BISPHENOL A DETECTION IN BIRD TISSUE: A PILOT STUDY**
    Alyssa Simpson and Dawn E. W. Drumtra*

Section II: Chemistry

Maxwell Center, Room 113

Seungjin Lee, Presiding

Chemistry Presentations

8:45 am
REFRAMING OSMOPHOBIC AND OSMOPHILIC EFFECTS**
Jonathan G. Cannon

9:00 am
A USER-FRIENDLY AI-DRIVEN SIMULATION MODEL TO ESTIMATE AND REDUCE DAILY MICROPLASTIC EXPOSURE
Joshua Han and Sang Hyuck Park*

9:15 am
EXPLORING HYDROGEN BONDING IN SECONDARY AND TERTIARY AMINES FOR ENHANCED TSSE EFFICIENCY: INSIGHTS FROM NMR ANALYSIS
Christina Le, Kesia Ajith*, Ashanti Moore*, and Seungjin Lee*

9:30 am
ENVIRONMENTAL JUSTICE AND PFAS CONTAMINATION IN GEORGIA: SOCIOECONOMIC DISPARITIES AND DRINKING WATER QUALITY ANALYSIS
Claire Park and Sang Hyuck Park*

10:00 – 11:00 am - Section Business Meeting

Chemistry Posters (will be displayed Friday 4:00–5:30 pm)

1. NEAR INFRARED STUDY OF HYDRATION OF AQUEOUS HYDROXIDE **
   Jaemin Ahn and Charles Pibel*

2. CONSTRUCTING A HANGING DROP OSMOMETER**
   Landon C. Derr and Jonathan G.Cannon*

3. PURIFICATION OF A RECOMBINANT GFP-PREPTIN FUSION PROTEIN**
   Apoorva Kollaram, Chayce C. Schuler*, and Jonathan M. Meyers*

4. EXTRACTION OF PER- AND POLYFLUOROALKYL SUBSTANCES FROM MUSCLE TISSUE SAMPLES OF FISH IN THE CHATTAHOOCHEE RIVER AND ITS TRIBUTARIES**
   London Van Every and D. W. Holley*

5. INVESTIGATING THE CORRELATION BETWEEN REGULAR MODERATE-FLOW MENSTRUAL PRODUCTS BASED ON BRAND AND THE LEVELS OF ENDOCRINE-DISRUPTING CHEMICALS (EDCS)**
   Julia E. Wise, Siriporn M. Johnson*, Destiny N. Palominos*, and Christina F. Wise**

Section III: Earth and Atmospheric Sciences

Maxwell Center, Room 106

Samuel Mutiti, Presiding

Earth and Atmospheric Sciences Presentations

8:30 am

A GEOSPATIAL MODELING OF SILTING IN A LOCAL FRESH WATER RESERVOIR IN THE TEMPERATE SOUTHERN INNER PIEDMONT ECOREGION OF GEORGIA

Ranbir S. Kang, Tristan Bollenbaugh, and David Kirkley**

8:45 am

THE ROOSEVELT IMPACT STRUCTURE: EVIDENCE OF A LARGE ASTEROID OR COMET COLLISION IN WEST-CENTRAL GEORGIA 800 MILLION YEARS AGO

R. S. Harris, Steven J. Jaret, Peter H. Schultz, and Edward F. Albin

9:00 am

EVALUATING THE CHRONOLOGICAL DISTRIBUTION OF LATE PLEISTOCENE FOSSIL-BEARING LOCALITIES AND MEGAHERBIVORE SPECIES IN SOUTHEASTERN NORTH AMERICA*

Mary Dickens, Bricen Popko*, Christopher Seminack, Alfred J. Mead, and David Patterson*

9:15 am

INVESTIGATING THE RELATIONSHIP BETWEEN SOIL MICROBIAL COMMUNITIES AND GROUNDWATER QUALITY ON A BARRIER ISLAND**

Muzila Nchimunya and Samuel Mutiti*

9:30 am

CHANGES IN ALGAL COMMUNITIES AS AN INDICATOR OF SALTWATER INTRUSIONS

Wiley J. Bundy, Samuel Mutiti, Kalina Manoylov, and Anna Agi**

9:45 am

ASSESSING SALTWATER INTRUSION AND TREE MORTALITY ON SAPELO ISLAND: IMPLICATIONS FOR COASTAL ECOSYSTEM RESILIENCE**

Megan Martin, Christine Mutiti, and Samuel Mutiti*

10:00 am – 11:00 am Section Business Meeting

11:00 am

INTEGRATED BIOLOGICAL, GEOPHYISCAL, AND GEOCHEMICAL CHARACTERIZATION OF MINE WASTE FOR PHYTOREMEDIATION AND BIOENERGY PRODUCTION

Samuel Mutiti and Rennie Kaunda

Earth and Atmospheric Sciences Posters (will be displayed Friday 4:00–5:30 pm)

1. CORRELATION BETWEEN AN INVASIVE SPECIES' PRESENCE AND THE QUANTITY OF ORGANIC CARBON IN SOIL AND TREE BIOMASS**
   Victoria Alden, Mary Evelyn C. Pritchett*, and Christine Mutiti*

2. GEOSPATIAL ANALYSIS OF FLUVIAL GEOMORPHOLOGY OF THE LITTLE TALLAPOOSA RIVER WATERSHED
   Ana dos Santos and Andrew H. Ivester*

3. AN EXPANSION OF LATE PLEISTOCENE MICROVERTEBRATE FOSSIL REMAINS FROM CLARK QUARRY, COASTAL GEORGIA
   Sam Hempen, Julian Buka*, Grace Bowser*, Alejandro Canela*, Claire Cook*, Austen Kuhlmann*, Maya Meydan*, Kim Nguyen*, Jack Orr*, Bricen Popko*, Parham Wallin*, Erin Barding, Christopher Seminack, Alfred J. Mead, and David Patterson*

4. APPLICATION OF ArcGIS Pro BASED SPATIAL INTERPOLATION TECHNIQUES FOR THE MANAGEMENT OF FRESHWATER RESOURCE
   David A. Kirkley and Ranbir S. Kang*

5. A ROADMAP FOR EXTRACTING SOIL DIATOMS**
   Riley Steptoe and Andrew H. Ive*

6. OFFSETTING ANNUAL CARBON EMISSIONS WITH CARBON SEQUESTRATION ON COLLEGE OF COASTAL GEORGIA'S MAIN CAMPUS
   Amber D. Tankersley, Maya Floratos*, and Isabella M. Theus*

Section IV: Physics, Mathematics, Computer Science and Technology

Maxwell Center, Room 116

Jay P. Dunn, Presiding

Physics, Math, Computer Science, Engineering, & Technology Paper Presentations

8:30 am
LOCATING EXOPLANETS USING LIGHTKURVE**
*Jackson C. Bing**

8:45 am
UNIFIED STUDY OF THE CLASSICAL HALL EFFECT**
Carter Reed, Javier Hasbun, Wyatt Ackermann, and Landewatte DeSilva*

9:00 am
DESIGN OF A HIGH VACUUM SYSTEM USING SOLIDWORKS**
Rhys Medhurst and Lu Kang*

9:15 am
ENHANCEMENT OF DIELECTRIC CONSTANT – PARAMETRIC STUDY
*Arun K. Saha and Jaden C. Atkinson**

9:30 am
DEVELOPMENT OF A MICROWAVE INTERFEROMETRY BASED CHEMICAL ANALYZER**
Rode O. Peters and Shantanu Chakraborty*

9:45 am
MICROSTRIP BASED MICROWAVE BIOSENSORS WITH POLYMER RESIN STRUCTURE
Shantanu Chakraborty and Romeo D. Montague

10:00 – 11:00 am Section Business Meeting

11:00 am
JUPITER'S CHANGING OVAL BA
Richard W. Schmude

11:15 am
BRIGHTNESS CHANGES IN THE SEMI-REGULAR VARIABLE STAR RZ-ARIETIS
*Richard W. Schmude and Qasim Ahmed**

11:30 am
COMPARING EXPECTED THEORETICAL HYDROGEN LINE PEAK AVERAGES AGAINST EXPERIMENTAL DATA**
Wyatt Ackermann, Javier Hasbun, and Landewatte DeSilva

Physics, Math, Computer Science, Engineering & Technology Posters (will be displayed Friday 4:00–5:30 pm)

1. PROJECT D.O.R.A.: EXPLORATION ROVERS USING ROS2 AND SLAM**
   Ewura Ama Awere, Shone Cherian*, Tamera Crawford*, and Jennifer Jimenez-Hernandez**

2. EXAMINING THE CRYSTALLINE STRUCTURE OF NANOCERIA
   Alejandra Gomez, Emily Manqueros*, and Kisa Ranasinghe*

3. THE SHOOTING METHOD: AN EFFECTIVE TOOL FOR BOUNDARY VALUE PROBLEMS IN ODE
   Jayanti R. Saha and Ella Okoro*

4. A COMPACT MICROSTRIP BASED PATCH ANTENNA FOR MULTIBAND APPLICATIONS**
   Tyler A. Knox, Jaylen T. Chatfield, and Hector Prieto*

5. EXOPLANET TRANSIT
   *C. L. Taylor Jr.**

6. A COMPACT MICROSTRIP BASED PATCH ANTENNA FOR MULTIBAND APPLICATIONS**
   Tyler Knox, Jaylen Chatfield, and Hector Prieto*

Section V: Biomedical Sciences

Rollins Campus Center, Hatcher Room (Room 108)

Kasey Karen, Presiding

Biomedical Sciences Presentation Schedule

8:15 am
DETERMINING THE PATHOGENICITY OF THE H307R VARIANT OF HUMAN BMP15 USING BIOINFORMATICS METHODS
Emma E. Hopper and Shane A. Webb*

8:30 am
THE EFFECT OF CANNABINOIDS ON THE DEVELOPMENTAL MORPHOLOGY OF ZEBRAFISH: A SUMMARY**
*Montana Owens**

8:45 am
APPLICATION OF CRISPR TO REMOVE MULTIPLE BETA-LACTAMASE GENE VARIANTS**
John T. Ray and Andrea L. Kwiatkowski*

9:00 am
DETERMINING IF EYESIGHT OF DIVISION II ATHLETES CORRELATES TO SPORT AND HOW IT COMPARES TO A GENERAL COLLEGE POPULATION**
Chloe E. Schmidhuber, Victoria J. Shanahan*, Emily L. Brennaman*, Kamryn D. Bates*, and Jennifer C. Schroeder*

9:15 am
DETERMINATING IF CERTAIN DIVISION II ATHLETES HAVE A GREATER WINGSPAN TO HEIGHT RATIO COMPARED TO A GENERAL COLLEGE POPULATION**
Victoria J. Shanahan, Chloe E. Schmidhuber*, Emily L. Brennaman*, Kamryn D. Bates*, and Jennifer C. Schroeder*

9:30 am
THE ROLE OF ADENOVIRUS PROTEIN E4 11K IN P BODY PROTEIN RELOCALIZATION**
Sarah West, Heather Vincent*, and Kasey A. Karen*

9:45 am
CHARACTERIZATION OF THE INTERACTION BETWEEN ADENOVIRAL PROTEIN E4 11K AND THE DNA-PK-DEPENDENT DNA DAMAGE RESPONSE**
Heather Vincent, Kindle Reeves, and Kasey A. Karen*

10:00 – 11:00 a.m. Section Business Meeting

Biomedical Sciences Posters (will be displayed Friday 4:00–5:30 pm)

1. HIP MOBILITY EFFECTS ON BAT SPEED IN COLLEGIATE BASEBALL AND SOFTBALL
   Dakota Connell and Justine M. Hardy*
2. LIKELY PATHOGENICITY OF D119A AND K146N VARIANTS OF HUMAN IDUA
   Hannah L. Cooper, Colton E. Glaze, and Shane A. Webb
3. KNEE RANGE OF MOTION AND RUNNING SPEED IN COLLEGIATE SOFTBALL AND BASEBALL ATHLETES
   Abbey Flowers and Justine M. Hardy*
4. THE RELATIONSHIP BETWEEN PITCH CLOCK AND PITCHING VELOCITY IN COLLEGIATE BASEBALL PLAYERS
   Noah Gilbert and Justine M. Hardy*
5. THE RELATIONSHIP BETWEEN HIP AND KNEE ANGLES AND THE JUMP FORCE PRODUCED
   Matthew Hager and Justine M. Hardy*
6. OBSERVING THE ANTI-BACTERIAL PROPERTIES OF OREGANO AND THYME ON ORAL BACTERIA
   Elizabeth A. Hernandez, Andrea L. Kwiatkowski, and Paul T. Arnold*
7. THE RELATIONSHIP BETWEEN ANKLE, KNEE, AND HIP MOBILITY AND LOWER LIMB FORCE PRODUCTION IN COLLEGIATE BASEBALL PLAYERS
   Chandler Koerner and Justine M. Hardy*
8. EFFECTS OF SUGAR INTAKE ON COLLEGIATE STUDENTS MEMORY RECALL
   Katelyn Ladner and Justine M. Hardy*

9. DOES VITAMIN D SUPPLEMENTATION IMPROVE PHYSICAL COMPONENTS IN COLLEGIATE ATHLETES REGARDING STRENGTH, ENDURANCE, AND POWER?
   Bradley Owens and Justine M. Hardy*

10. DOES STRENGTH TRAINING IMPROVE CLUBHEAD SPEED IN COLLEGIATE GOLFERS?
    D. Tate Worrell and Justine M. Hardy*

Section VI: Philosophy and History of Science

Maxwell Center, Room 117

Bryan Briones, Presiding

Philosophy and History of Science Presentation Schedule

9:00 - 9:25 am
THE MAKING OF A MENTOR
Isom H. Herron

9:30 – 9:55 am
TRANSFORMING WORLD CITIZENS INTO NATIONAL AND GLOBAL LEADERS AT BREWTON-PARKER COLLEGE
William A. Said

10:00 – 11:00 am – Section Business Meeting

Section VII: Science Education

Rollins Campus Center, Room 258

Mike Sakuta, Presiding

Science Education Presentation Schedule

8:15 am

PARTICIPANT SET-UP & PROJECTOR CHECK

8:30 am

WELCOME & INTRODUCTIONS

8:45 am
THE BIZZARE RANKINGS OF GEORGIA PUBLIC UNIVERSITIES AS THEY ARE CLEANING UP THE ELITES' MESS AND EDUCATING THE MASS FOR LESS
William A. Said

9:00 am
ANALYZING THE EVOLUTION AND FREQUENCY OF CHEMISTRY TERMINOLOGY IN EDUCATION AND ONLINE COMMUNITIES
Dilyn Addo, Andre Moise*, Lauren Olsen Trujillo*, and Seungjin Lee*

9:15 am
FINDING EQUILIBRIUM CONSTANT VALUES FOR THE ETHANOL-ACETIC ACID REACTION
Taylor K Preston and Richard W. Schmude Jr*

9:30 am
MAKING THE MOST OF THE IODINE CLOCK REACTION IN FRESHMAN CHEMISTRY LAB
Richard W. Schmude Jr. and Taylor K. Preston

9:45 am
AI IN THE CLASSROOM: CHATGPT'S PERFORMANCE IN INTRODUCTORY PHYSICS
Shantanu Chakraborty, Bilas Paul, and Ganga Sharma

10:00 – 11:00 am Section Business Meeting

11:00 am
MASTER COURSE TEMPLATE IMPLEMENTATION EFFECT OF DFW RATES AND STUDENT SUCCESS IN ONLINE INTRODUCTORY ASTRONOMY **
Ulrike G. Lahaise and Martha Fulk

Section VIII: Anthropology

Maxwell Center, Room 109

Alice Gooding, Presiding

Anthropology Presentations

8:30 am
THE EFFICACY OF 3D MODELS OF HUMAN BONE IN UNDERGRADUATE ANTHROPOLOGY CLASSES
Bailey Walton, Susan Kirkpatrick Smith, Alice F. Gooding, and Uli Ingram*

8:45 am
THE BALL GAME, SACRIFICE, AND SKULL RACKS IN PRECONTACT MESOAMERICA
*Roger C. Leonard**

9:00 am
THE ROLE OF ARCHITECTURAL SPACE DURING THE MIDDLE PRECLASSIC AT PACBITUN, BELIZE
Terry G. Powis, George J. Micheletti, and Kong Cheong

9:15 am
DATA AND DEBATES: LEGACY RADIOCARBON DATA IN SOUTH ASIA
Teresa P. Raczek

9:30 am
MODELING THE PAST: LIDAR DOCUMENTATION AND 3D VISUALIZATON IN THE BLUE RIDGE**
M. Jared Wood

9:45 am
GIS ANALYSIS OF FORENSIC BODY DUMP SITES ACROSS GEORGIA OVER A TEN-YEAR PERIOD**
Zamir Norry, Alice F. Gooding, Uli Ingram, and Ranbir S. Kang*

10:00 – 11:00 a.m. Section Business Meeting

Section IX: Psychological Science

Rollins Campus Center, Student Senate Chambers (Room 203)

Nicole Harsch, Presiding

Psychological Science Presentation Schedule

8:15 am
PARTICIPANT SET-UP & PROJECTOR CHECK

8:30 am
WELCOME & INTRODUCTIONS.

8:45 am
THEMATIC ANALYSIS OF THE SIGHTS AND SOUNDS OF VETERAN IDENTITY: CONCLUSIONS FROM COHORT 1
Ella Swartz, Anslee Temples*, Lauren Ernst-Fortin*, Lauren Gibson*, Hadley Quigg*, Stephanie E. Jett, and Laurie Peebles*

9:00 am
MENTAL HEALTH TREATMENT CHOICE IN THE QUEER COMMUNITY**
Trenholm Fahy, Stephanie E. Jett,*

9:15 am
PEOPLE, PLACES, AND THINGS: EMOTION & ANIMACY IN SCENE PERCEPTION
Han Jia, Dean Sabatinelli, Kaitlyn M. Bennett*, Caitlin S. Curtin**

9:30 am
THE IMPACT OF MEDICAL JARGON ON PATIENT COMPREHENSION AND SATISFACTION
Lorin E. Tidick and Amy L. Boggan*

9:45 am
ECHO CHAMBER: THE EFFECTS OF CONFIRMATION BIAS ON POLITICAL ATTITUDES
Sara M. Helm and Amy L. Boggan*

10:00 – 11:00 am Section Business Meeting

11:00 am
IMPACT OF URBANIZATION, HABITAT STRUCTURE, AND FUNCTIONAL CONNECTIVITY ON SCAVENGER BEHAVIOR IN MOBILE COUNTY, ALABAMA AND CENTRAL GEORGIA**
Sophie Williams, Shea Pagett*, Adam M. Stern*, Stephanie E. Jett*

Psychological Science Posters (will be displayed Friday 4:00–5:30 pm)

1. MATERNAL FACILITATION OF JOINT ATTENTION IN INFANTS' SECOND YEAR OF LIFE: A COMPARATIVE ANALYSIS OF NATURALISTIC AND STRUCTURED CONTEXTS
   Addison E. Montroy, Kate Lindig, Meg Fyan, Christian M. Jerry, Drew Abney, and Janet Frick*

2. LINKING DHEAS DIURNAL RHYTHMS AND SLEEP: EVIDENCE OF ASSOCIATIONS WITH SLEEP DISTURBANCES AND SUBJECTIVE SLEEP RATINGS
   Abigail S. Marne and Scott D. Moffat*

3. MAJOR CHOICE FOR AFRICAN AMERICAN WOMEN**
   *Teresa Murphy-Adams**

4. GENDER ESSENTIALISM INCREASES DISPOSITIONAL ATTRIBUTION IN ROMANTIC RELATIONSHIPS
   Mekaylah Dantzler and Yian Xu

5. MINDFULNESS MEDITATION REDUCES ESSENTIALIST BELIEFS ABOUT RACE AND GENDER
   Yian Xu, Juan Tole, John Coley*

6. CLINICAL SIGNIFICANCE AND EFFICACY IN MENTAL HEALTH CLINICAL TRIALS
   Kianan Carr and Alexander O. Crenshaw*

7. A STUDY ON HSP & EI**
   Maryna A. Steiner and Cassandra Baldwin

8. WHAT IS REASONABLE? EFFECTS OF DIFFERENT JURY INSTRUCTIONS IN CASES OF POLICE ABUSE OF FORCE**
   Katherine M. Kaylor, John Le*, Autumn Smith*, Haley Baker*, and Amy A. Hackney*

9. IS THERE A RELATIONSHIP BETWEEN PERCIEVED SOCIAL SUPPORT AND SOCIAL NETWORK DIVERSITY AND EXPERIMENTAL PAIN INTENSITY, PAIN CATASTROPHIZING, AND STRESS?
   Emma G. Parks, Percy W. Ackerman*, and Benjamin P. Van Dyke*

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