College of Agricultural and Environmental Sciences Fall 2009

The Official Newsletter of the Young Scholars Program



Jessica Loggins, Athens Campus Coordinator



Be-Atrice Cunningham, Griffin Campus Coordinator



Susan Reinhardt, **Tifton Campus Coordinator**

Phone: (706) 542-8826

Fax: (706) 542-8820 www.ysp.caes.uga.edu

Star-Studded Student: Christine Akoh

The typical first year students entering the University of Georgia find themselves in a whirlwind. They are often lost in a vast campus of opportunities and are trying to find their niche. Christine Akoh is anything but an ordinary student. In her first year at the University, Christine has joined the Delta Epsilon lota Academic Honor Society, earned a CURO Fellowship, and has become a regional officer for MANRRS.

Surprisingly, the University of Georgia was not even on her radar when she was in high school. Growing up in Athens, Georgia for most of her life, Christine wanted to attend a university that would give her the opportunity to escape and experience another world. At first, Christine thought that attending UGA would not allow her to discover her full potential. However as time would come to tell. this was far from the truth.

Christine's first experience with UGA occurred in the summer before her junior year in high school. For six weeks, Christine participated in the Young Scholars Program and CIIOLU conducted research in the pharmacology department. Her experience in the pharmacology department sparked her interest in rsifu of high-level research so much that she participated in the program for another two years.

The level of intellectual stimulation that Christine received while she

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Agriculture have laid the foundation for my current undergraduate activities and for my future career aspirations."

was a Young Scholar opened her eyes to the opportunities that UGA had to offer. Christine also decided to major in food science, which is in the College of Agriculture and Environmental Sciences, because of various internship, research, scholarships, and international travel opportunities. According to/Christine, "My experiences in the College of Agriculture have laid the foundation for my current undergraduate activities and for my future career aspirations." Christine hopes to use these opportunities to further her goal of becoming a world health advocate.

Coastal Aspirations



Mark Huguet was in the Governors Honors Program when he first heard about the Young Scholars Program. The thing that caught his eye most about the program was that it filled his skill setting of what he wanted to become. He told The Informer that he remembered traveling to Costa Rica like it was just yesterday. "It was amazing; my parents think it ruined me because after I came back I have always wanted to leave the country again." Huguet told us that the Young Scholars Program served as a springboard for other activities that he was interested in. Mark is currently working as a computer consultant for small offices while working on his degree in agricultural economics as a fourth-year student at UGA. Huguet added a few words of guidance for incoming freshmen. He said "do not be afraid of college. Although it is a big change, it is for the better." Ten years from now Mark hopes to see himself in a penthouse on the Brazilian coastline.

Cancer Research

Cancer is a disease that affects millions of people around the world. As the age of the world's population continues to increase, cancer will become a larger burden on the healthcare sector. Patients affected by this disease will need passionate researchers to discover a cure. Sambita Basu, a third year Microbiology major with a Spanish minor at UGA, is one of these passionate researchers that desires to bring the world one step closer to a cure.

Sambita has been diligently studying cancer at the Complex Carbohydrate Research Center (CCRC) at UGA. For the past six months, Sambita has been working on analyzing the glycoprotein composition of malignancies under the guidance of Dr. Michael Pierce and Dr. Gerardo Alvares-Manilla. The objective of Sambita's research has been to identify glycobiomarkers in cancer and other physiological processes so that researchers can better understand the steps of disease progression. In particular, she tests cancerous and non-cancerous colon tissue samples that are obtained from the Medical College of Georgia. According to Sambita, "as small as each finding may seem, they cumulatively represent months or even years of unbridled effort and aspiration."

High-level research is nothing new for Sambita. As a sophomore high school student, she was able to participate in the Young Scholars Program at the Griffin campus. Her research under Dr. Yen-Con Hung served as the stepping stone towards



her future endeavors in science. She has gone on to participate in the International Science and Engineering Fair in 2006. Sambita was recently named a 2009 CURO Summer Fellow, and she plans on completing her thesis by the end of this year.

Sambita hopes that her experience in Dr. Pierce's laboratory will help prepare her for medical school, where she hopes to specialize in oncology. Being the ambitious student she is, Sambita has already begun to make plans for next summer, as she wants to internship at the Fox Chase Cancer Center in Philadelphia or the Center for Disease Control in Atlanta. Whichever internship opportunity she decides on, she will be a very qualified candidate.

Blast from the Past Jack Varner

ack Varner, a former Young Scholar in 2001 and 2002, fondly remembers the many experiences that the program has given him. One of these memorable moments occurred on his trip to Ghana. In June 2002, Jack became part of the first Young Scholars group to study abroad in Ghana. This pioneer group of students spent two weeks in bungalows on the campus of the University of Ghana in Accra. At the university, Jack learned about Ghanaian agricultural practices, water treatment, and food preparation. Jack also spent time at a professor's house, where he played ping-pong and piano with the professor's two children. As part of the two weeks, Jack also visited the Cape coast, where he saw the old slave castles were slaves were kept before their journey on the middle passage.

Experiences such as the trip to Ghana made a great impression on Jack. He says that "the trip to Ghana was one of the most incredible experiences of my life, and it was truly eye-opening. The differences in culture from societal values to agriculture allowed me to be exposed to something so vastly different from anything I had experienced up to then."

Need a Transplant????



THE NEORMER

The Young Scholars Program made such a profound impression on Jack that he decided to attend the University of Georgia, where he graduated with a dual degree in Environmental Health Science and Biological Science. He is currently working in the sales department of a business that makes emission testing equipment.



Wondering who to go to if you need a bone marrow transplant match? Well, **Lauren Moss** can point you in the right direction. Lauren, a 2003 Young Scholar participant, works at the Winship Cancer Institute with Dr. Edmund Waller. Her research deals with Graft vs. Host Disease (GvHD), which is a serious and often fatal complication in allogenic bone marrow transplantation. In particular, she wants to develop pre-clinical methods of manipulating donor T-cells in order to reduce the occurrence of GvHD.

Lauren says that she loves her job because "finding ways to fight these diseases means to eventually give someone a new chance of life." But where did she discover her love for research? According to Lauren, the Young Scholars Program provided her first laboratory experience. In the program, Lauren worked with Dr. Ynes Ortega at the Center of Food Safety on the Griffin campus. Working with infectious agents helped spark Lauren's interest in developing cures for diseases. Lauren fed her curiosity by continuing to work with Dr. Ortega's laboratory in the summer while she attended Berry College for her undergraduate degree. She later received her master's degree in infectious disease at UGA.

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A World of Science: Nancy Hinkle

The Young Scholars Program has been able to call on professors from various disciplines within the College of Agricultural and Environmental Sciences to help with the six-week internship program. Professors such as **Dr. Nancy Hinkle** sacrifice their time and energy to cultivate the scientific curiosity of high school students.

Dr. Hinkle is a professor of veterinary entomology at UGA. She earned her B.S. and M.S. at Auburn University, and she earned her Ph.D. from the University of Florida in 1992. Her work at UGA focuses on disease transmission from insect vectors to animals.



Dr. Hinkle asserts that her work is important because diseases that are transmitted from insects to humans and animals affect our health and agricultural production. For instance, pet owners spend more on flea control than any other aspect of pet health. Additionally, one-third of horses that contract West Nile Virus die from it. Disease-transmitting insects play a significant role in our economic expenditure, and Dr. Hinkle is committed to minimize these costs.

Dr. Hinkle accredits her teachers and mentors for encouraging her "obsession" with bugs. As a mentor for YSP, she has shared her excitement for insects with young people. She says that "a bright determined young student is going to forge his own path whether he has a mentor or not, but being around adults who share his interests can be stimulating and encouraging." Dr. Hinkle also encourages her mentees to challenge themselves academically by taking a variety of courses and not just the ones that they are interested in. She believes the world is intertwined and that a broad education is never wasted.

Life After YSF



Rickey Lane, YSP 2007 & 2008 *Dutchtown High School*, Hampton, GA 4.0 GPA

Involvement: Student Government Association (Class President), Beta Club, National Honors Society, and Thespian Society.

Will be attending Georgia State University this fall

Charles Shyng, YSP 2004, 2005, and 2006 Major: Molecular Biology and Biochemistry Minor: Biomedical Physics *Washington University*, St. Louis, MO Graduation Date: May 2010

Plans after graduation: to enroll in a Ph.D. program in Cell Biology or Neuroscience



"My most memorable experience was my first internship under Dr. Steven Stice. Working with him actually helped me choose what I wanted to do with my future and solidified my interest in research. To say the least, YSP has helped define my life...at least up until now."

2009 YOUNG SCHOLARS PROGRAM

The 2009 Young Scholars class is one of the most competitive groups of students to come through the program in its ten-year history. This year's class boasts an average GPA of 3.34, and its students are involved in several high school activities such as Student Government Association, Math Counts, Model United Nations, and student mentoring.

Every year, several second and third-year program participants get the opportunity to study abroad for ten days. This year, sixteen students from the Athens, Griffin, and Tifton campuses traveled to Costa Rica for ten days to participate in an international apprenticeship program at UGA campus in Alto San Luis. At the university, the young scholar participants worked alongside university students to learn about ecotourism, carbon offsetting, milking, fruit growing and ornamentals. In addition to their studies, the students lived with host families in the Monteverde region.



2009 Athens Young Scholars Participants



YSP Peer Mentors R-L: Supriya Singh, Nathalie Grant, Christine Akoh, and Claire Stice (not pictured): Britney Keller, Andrew Cartey, and Marlteze Saffold

THE 2009 ATHENS YOUNG SCHOLARS PARTICIPANTS

Guthrie Akins, Junior Vet School, Clinicians of the Large Animal Teaching Hospital Morgan County High School

Kayla Anderson, Junior Poultry Science, Dr. Kristen Navara Oglethorpe County High School

Briana Bowles, Junior Food Science, Dr. Louise Wicker Clarke Central High School

Sandra Chumba, Sophomore Entomology, Dr. Nancy Hinkle Cedar Shoals High School

Shireen Dhir, Senior Horticulture, Dr. Paul Thomas Houston County High School

Jasmine Edwards, Senior Plant Pathology, Dr. Ron Walcott Clarke Central High School

Samuel Fisher, Senior Food Science, Dr. Jake Mulligan Oconee County High School

Rebecca Fordyce, Junior Animal Science, Tracey Stice Oglethorpe County High School

Tabitha Green, Sophomore Horticulture, Dr. Paul Thomas TEACH Charter School

Ka-Leshia Gresham, Junior Plant Pathology, Dr. Scott Gold Cedar Shoals High School

Stephanie Guzman, Senior Ag. Economics, Dr. Octavio Ramirez *Clarke Central High School*

Marlen Huato, Senior Horticulture, Dr. Paul Thomas *Cedar Shoals High School*

Sanket Jani, Sophomore Animal Science, Dr. Steve Stice Blythewood High School

Kelandria Lee, Senior Food Science, Dr. Mark Harrison Cedar Shoals High School Natalie Lett, Senior Crop and Soil, Dr. Wayne Parrott Clarke Central High School

Joshua Lindsey, Junior Ag. Engineering, Dr. Elliot Altman Woodland High School

Ridwan Mahbub, Senior Horticulture, Dr. Paul Thomas Cedar Shoals Hgh School

Imran Mahbub, Sophomore Ag. Engineering, Dr. Elliot Altman Cedar Shoals High School

Isabel Ontaneda, Junior Plant Pathology, Dr. Ron Walcott Cedar Shoals High School

Lindsay Opie, Junior Food Science, Dr. Robert Shewfelt North Oconee High School

Ivan Santillan, Junior Poultry Science, Dr. Brian Fairchild Clarke Central High School

Shundra Seay, Junior Poultry Science, Dr. Scott Russell Cedar Shoals High School

Cherranda Smith, Sophomore Food Science, Dr. Karina Martino Clarke Central High School

Mei Tsuruta, Junior Environmental Science, Dr. Jeff Fisher Cedar Shoals High School

Russell Turner, Junior Animal Science, Dr. Mark Froetschel Nathanael Greene Academy

Paige Vaden, Sophomore Vet School Clinicians of the Large Animal Teaching Hospital Morgan County High School

Kai Wang, Junior Animal Science, Dr. Mark Froetschel North Oconee High School

Zachary Williams, Senior Poultry Science, Dr. Robert Beckstead Oconee County High School

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THE 2009 TIFTON YOUNG SCHOLARS PARTICIPANTS

Will Drew, Sophomore Tift County High School

Sydney Herrin, Junior Wayne County High School

Anna Lee Hillard, Junior Tift County High School

Yi Huang, Junior Tift County High School

Elijah Ludden, Senior Tift County High School

Benjamin McInnes, Junior Lowndes High School

Kelcie McLean, Junior Tift County High School

Caleb Morris, Junior Cook County High School

Kelly Murray, Junior Tift County High School

Narke Norton, Junior Tift County High School Anshuli Patel, Junio Valdosta High Schoo

Paayal Patel, Junior Tift County High School

Tyler Reeves, Junior Irwin County High School

Sarah Rooks, Sophomore Turner County High School

Chandler Rowe, Junior Irwin County High School

Kurt Seigler, Junior Tift County High School

Sehrish Vigar, Junior Tift County High School

Elizabeth Weeks, Junior Tift County High School

Melvin Whitsett, Junior Tift County High School

Whitney Yarber, Junior Cook County High School

THE 2009 GRIFFIN YOUNG SCHOLARS PARTICIPANTS

Tsion Behailu, Sophomore Lovejoy High School

Skylar Bragers, Senior Pike County High School

Matthew Cannon, Sophomore Lovejoy High School

Shannon Clark, Senior Woodland High School

Breanna Coursey, Senior Pike County High School

Jamondi Dallas, Junior Griffin High School

Da'Shundria Davis, Junior Griffin High School

Keith DeVeaux, Junior Eagles Landing High School

Nathan Flithcroft, Sophomore Griffin High School

Jamal Foster, Sophomore Faith Christian Academy

Griffin High School

Bethany Harris, Senior Griffin Christian

Kendra Hearn, Junior Griffin High School

David Henry, Junior Lamar County High School

Jocelyn Hines, Junior Griffin High School

Amber Holloway, Senior Lamar County High School

Deena Husein, Senior Lovejoy High School

Courtney Jackson, Sophomore Lamar County High School

Leigh Karas, Junior McIntosh High School

Elizabeth Kwok, Sophomore Griffin High School

Andrew Mata-LeClerc, Junior Pike County High School

Raine Mathis, Junior Pike County High School

Alicia Ming, Senior Griffin High School

Rickell Hardaway, Sophomore John Neel III, Junior Stratford Academy

> Callum Reid, Junior Spalding High School

Thanh-Thanh Tran, Junior Lovejoy High School



2009 Tifton Young Scholars Participants



2009 Griffin Young Scholars Participants

Young Scholars Program 2005: Graduating Serier Class of 2009

The Young Scholars Program is proud of the many accomplishments that its students have achieved at universities around the country. It is with great pleasure that we congratulate the Class of 2009 for completing their undergraduate careers. The Young Scholars Program would also like to wish these former participants good luck in their future endeavors.





2005 Ghana Trip

Rabah Syed

2005 Costa Rica Trip



About YSP

What is the Young Scholars Program?

It is a six-week summer experience for outstanding students. It combines individual mentoring, structured activities, and practical work experience in a research setting. The program is sponsored by the University of Georgia, College of Agricultural and Environmental Sciences.

Purpose of program:

The goal of the program is to encourage outstanding high school students to pursue education and careers in food and agricultural sciences.

Program Structure:

The students work 40 hours per week and are supervised by faculty mentors and the

education coordinator. With their mentor, each student develops a project related to the mentor's research. At the conclusion of the internship period, the student conducts an oral presentation and writes an essay on their apprenticeship experience.

Program requirements. Students must:

- 1) Be 16 years old by June 1st
- 2) Demonstrate serious interest in science or math
- 3) Be willing to make commitment to scientific exploration
- 4) Submit a written aplication
- 5) Be selected by the Young Scholars Program Commitee

HELP NEEDED

Peer Mentorship Program

The Peer Mentoring Program is looking for former Young Scholars and MANRRS participants to help out with the Young Scholars program in 2010. Volunteers will spend time with mentees in the summer, talking with them about their experiences in college. If you are interested, please contact **Jessica Loggins** at caesodr@uga.edu.

YSP Judges

The Young Scholars Program is looking for former Young Scholar students that would like to volunteer as judges for the YSP oral presentations in 2010. Interested individuals should contact **Jessica Loggins** at caesodr@uga.edu



The University of Georgia

College of Agricultural and Environmental Sciences Young Scholars Program 204 Lumpkin House Athens, GA 30602 Phone: (706) 542-8826 Fax: (706) 542-8820

www.ysp.caes.uga.edu

Dr. Ronald Walcott, Assistant Dean of Diveristy and Multicultural Affairs Jessica Loggins, Athens YSP Coordinator Be-Atrice Cunningham, Griffin YSP Coordinator Susan Reinhardt, Tifton YSP Coordinator Chike Akoh, Newsletter Editor Non-Profit Org. US Postage PAID University of Georgia