Word from the
Department Head

Mike Lacy

I hope you will enjoy catching up on what has been happening in Poultry Science in this edition of the UGA Poultry Wire newsletter. First, let me say how much we appreciate the loyal support of our alumni and friends. You are incredible. In our effort to recruit students into the Poultry Science and Avian Biology majors, we have been greatly assisted by individuals and companies who have generously to support undergraduate scholarships. Through our “Poultry Pioneers Scholarship Program,” we have added over $200,000 to our endowed scholarship fund and have the promise of adding several additional Poultry Pioneer Scholarships in the near future. We hope you will

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Two Avian Biology Majors
Named Outstanding CAES Undergrads

Sarah Hooper (Left) and Sarah Masoero (Right) with former Dean Bill Flatt

Each year the College of Agricultural and Environmental Sciences chooses an outstanding Junior and Senior undergraduate. It is a tremendous honor for a department to have one student selected for either award. Both recipients of these College-wide awards this year were Avian Biology majors.

Sarah Masoero was selected to receive the 2009 CAES Nesbitt-Flatt Outstanding Senior Award. Miss Masoero has not only distinguished herself in the classroom but has stood out as a leader on the UGA campus. Sarah has been involved in numerous clubs and activities, but she is most passionate about her work with the University’s
consider supporting student scholarships with your gifts to the department.  

Our Poultry Science major numbers have remained consistent in the 25-30 range the past 3-4 years. This number is adequate in terms of the health of our program from the University’s perspective, but we want more students and the poultry industry needs more of our graduates. As always, if you have knowledge of prospective students, let us know so we can contact them. The Avian Biology major, which replaced our former Poultry Science “Science Option,” has grown steadily and stands at 28 students this fall semester. The Poultry Science Department continues to be responsible for the Animal Health and Biological Science majors which have expanded to 113 and 362 students, respectively. Much of the reason for these increases revolves around the great job the faculty do in advising undergraduates. Graduate student numbers in the Department are higher than they have been in several years. We currently have 12 Masters and 16 PhD students. Our overall undergraduate and graduate student numbers are at record levels.

The faculty continues to conduct outstanding research and provide excellent educational programs to the poultry industry. Our extramural funding from granting agencies is the highest it has ever been. Bruce Webster and Sammy Aggrey were both awarded large USDA grants, and Amy Batal’s research received significant funding from the US Department of Energy. Essentially all of the faculty have research projects funded by extramural sources, and that is measure and testament to both the quality and productivity of their research and extension programs.

The state, national and global economic situation has been difficult for us all. We were poised to add two faculty positions in 2008, but the state’s budget crisis caused both to be put on hold - we trust temporarily. The Department continues to enjoy strong support from the poultry industry and the College of Agricultural and Environmental Sciences administration and we are confident our position needs will remain a high priority within the College and University.

Finally, please let us know if you think of anything we can do to serve you better. You are critically important to us, and we are immensely proud of our relationship with you. Stay in touch and keep us informed of what you are accomplishing personally and professionally. And when you are in the neighborhood, stop by and see us.

Rick Gerhold Awarded Phibro Animal Health Graduate Fellowship

Graduate student, Rick Gerhold, was awarded the 2009 Phibro Animal Health Corporation Graduate Fellowship. Dr. Gerhold holds a DVM degree and is currently working on a PhD under the direction of Dr. Larry McDougald. His research is focusing on coccidiosis control in game birds. The work being conducted by Dr. Gerhold will add to our knowledge of this disease and is expected to lead to a better understanding of drug efficacy.
CALENDAR OF EVENTS

CAES SOUTH CAMPUS TAILGATE
SATURDAY NOVEMBER 21, 2009
WWW.CAES.UGA.EDU/ALUMNI/EVENTS/TAILGATE/index.html

FALL COMMENCEMENT
DECEMBER 18, 2009
WWW.REG.UGA.EDU/OR.NSF/HTML/COMMENCEMENT

SPRING SEMESTER CLASSES BEGIN
JANUARY 7, 2010

INTERNATIONAL POULTRY SCIENTIFIC FORUM
JANUARY 25-26 2010
WWW.INTERNATIONALPOULTRYEXPOSITION.COM/IPSF

INTERNATIONAL POULTRY EXPO
JANUARY 27-29, 2010
WWW.IPE10.ORG

INTERNATIONAL POULTRY SHORT COURSE
FEBRUARY 1-4, 2010

DEEP SOUTH POULTRY CONFERENCE
APRIL 7, 2010
TIFTON, GA

SPRING COMMENCEMENT
MAY 8, 2010

Sarah Hooper was the recipient of the 2009 CAES Rising Star Award given to the outstanding third year student in the College. Miss Hooper’s academic record is exemplary. On a personal level, Sarah is an incredibly giving individual. She has had a long and successful commitment to the Girl Scouts and to the Guide Dog Foundation for the Blind. In particular, her service to the Guide Dog Foundation as their Northeast Georgia area coordinator is extraordinary. She has been very active in spreading her enthusiasm for this organization in the local community, especially among her peers as evidenced by the numerous guide dogs in training seen daily across the campus. Miss Hooper’s local group is the largest in the Southeast Region and one of the largest in the United States.

Mark Compton, Associate Professor & Undergraduate Coordinator

Mark Compton Named Josiah Meigs Professor

Mark Compton was named a University of Georgia Josiah Meigs Professor in recognition for his outstanding teaching accomplishments. The Meigs Professorship is the highest teaching award given by
the University. Dr. Compton’s signature “Power Chalk” lecture style was highlighted in his award announcement. This award puts an exclamation point on a long line of teaching awards for Dr. Compton. He has previously received the College of Agricultural and Environmental Sciences D.W. Brooks Teaching Award, the Poultry Science Association Teaching Award and the College and University Advisor Awards. He has earned the reputation of being one of the very best teachers at UGA.

Poultry Science Association Recognizes Adam Davis for Teaching Excellence

Adam Davis received the Novus Teaching Award at the 2009 Poultry Science Association annual meeting in Raleigh, NC. Dr. Davis teaches a senior level avian reproduction course and a very popular freshman level introductory course. He recently designed and developed a new study abroad course that has given Poultry Science and Avian Biology majors an opportunity to travel to Costa Rica.

Dr. Davis has been recognized previously for outstanding service to students. He is a past winner of the D. W. Brooks Teaching Award and the CAES and UGA Outstanding Advisor Awards. Students recognize him as being a highly knowledgeable teacher and advisor. His instruction, guidance and advice are coveted by the students with whom he interacts.

Jerry Cherry Becomes Poultry Science Association Fellow

Former Poultry Science department head, Jerry Cherry, was named a Fellow of the Poultry Science Association at the Association’s 2009 annual meeting. Dr. Cherry served as department head from 1986-1995. He moved up to Associate Dean for Research of the College of Agricultural and Environmental Sciences in 1995 and served in an administrative role with the College until his retirement in 2008. Dr. Cherry joins other faculty from the Department who have been named PSA Fellows: Arthur Gannon, Malcolm Reid, Hardy Edwards, Leo Jensen, Dan Fletcher, Henry Marks, and adjunct faculty Nelson Cox.

2008 Poultry Science Faculty Awards and Scholarships

Several Poultry Science faculty received awards in 2008. Jeanna Wilson received the D. W. Brooks Extension Award. Casey Ritz was the Poultry Science Association Phibro Extension Award winner, and Bruce Webster was recognized with the Poultry Science Association Poultry Welfare Research Award. Gene Pesti was recognized by our students as the recipient of the H. L. Marks Outstanding Service to Students Award.
**Poultry Science Undergrad Serves as Congressional Fellow**

Third year Poultry Science major, Bernie Tokarz, worked in Washington, DC as a Congressional Ag Fellow in Congressman Jack Kingston’s office during the 2009 Summer Session. Mr. Tokarz was selected for this prestigious internship by the College of Agricultural and Environmental Sciences. In addition to meeting with farm and agribusiness groups and assisting them with any legislative needs, he worked on the 2010 USDA and FDA Appropriations Bills. He said it was a thrill to see that legislation passed by the House of Representatives a few days before he left Washington to return to school for the Fall Semester.

**Poultry Science Undergrad Serves as CAES Ambassador**

Claire Stice, Senior Poultry Science major, was chosen to be one of the 2009-2010 College of Agricultural and Environmental Sciences Ambassadors. The CAES Ambassadors represent the College at alumni meetings, recruiting events, and other College and University functions. The Miss Stice is an officer in the Poultry Science Club, is active in her sorority and has served on the Ag Hill Council.

**Poultry Science Club News**

**2009 Club Officers**

Left to right: Rebekah Bowen, Laura Larson, Alex Byas, Lindsey Banks, Claire Stice, Josh Hamburg, and Levi Perkins.

The Poultry Science Club meets on the 2nd and 4th Tuesday of each month in Room 319 of the Poultry Science Building. Industry and university representatives speak at one of these meeting each month on career and internship opportunities. The club is active in both campus and industry events. Below is the club’s entry into the hay bale decoration contest for Halloween.
Poultry Science Student Awards and Scholarships

Twenty-five students were recognized at the 2009 Poultry Science Banquet as award winners or scholarship recipients. Over 100 students, parents, faculty and staff attended the Banquet held at the Georgia Center for Continuing Education. Total scholarship funds disbursed in 2009 exceeded $15,000.

2009 Award Winners:

**Outstanding Poultry Science Club Member**  
Josh Hamburg

**Poultry Science Club Rising Star**  
Laura Larsen

**Outstanding Poultry Science Senior**  
Chris Stephens

**Outstanding Poultry Science Junior**  
Claire Stice

**Outstanding Poultry Science Sophomore**  
Katie Collins

**Outstanding Poultry Science Freshman**  
Katie Burden

**Outstanding Avian Biology Senior**  
Erin Anderson

**Outstanding Avian Biology Junior**  
Caitlin Jones

**Outstanding Avian Biology Sophomore**  
John Ensley

**H. L. Marks Outstanding Service to Students Award**  
Dr. Brian Fairchild

2009 Scholarship Recipients:

**Hubbard Foundation Scholarship**  
Lindsey Banks and Levi Perkins

**Harold Harrison Scholarship**  
Anna Savelle

**J. B. Gay Memorial Scholarship**  
Claire Stice

**Billy Crider Scholarship**  
Laura Larsen

**Roy and Maye Durr Scholarship**  
Katie Collins

**Till M. Huston Scholarship**  
Katie Burden

**Winston May Scholarship**  
Sheilena Brookshire

**W. A. Crider Sr. Scholarship**  
Alex Byas

**Vince Booker Scholarship**  
Clayton Smith

**David Lathem Scholarship**  
Beth Anne Woodward

**Centurion Scholarship**  
Jessica Davis

**Georgia Poultry Federation Scholarship**  
Josh Hamburg

**Tom Arrendale Scholarship**  
Dustin Farmer

**Lee Arrendale Scholarship**  
Kelly Bain

**Joe Hatfield Scholarship**  
Jessica Spickler

**Steve and Ann Collier Scholarship**  
Ivelisse Milanes

**Poultry Science Faculty Scholarship**  
Megan Stowe

**Caswell Scholarship**  
Corey Farmer

**Georgia Egg Commission Scholarship**  
John Ensley

**Shirley Denton Scholarship**  
Victoria Broussard

**John Shutze Scholarship**  
Caitlin Jones
**Current Research**

We plan to highlight the research programs of a few faculty in each newsletter. Our three newest faculty are highlighted in this issue.

**Dr. Robert Beckstead**

**Molecular characterization of Hitomoniaisis in turkeys:** Histomoniaisis (blackhead disease) often causes high mortality in turkeys (50-100%) and morbidity in broiler breeder pullets. However, there is considerable variation in the severity of outbreaks. A national study of H. meleagridis strains is needed to find associations of strains with bird host species, to identify possible overlooked reservoirs of infection, and to determine the importance of these variants in expression of virulence. Our objective is to study the molecular basis of strain variation to identify virulence factors that could potentially provide new targets for immunization. Current research in our lab in collaboration with the lab of Dr. Larry McDougald supports the hypothesis that there are several isolates of H. meleagridis. Additionally, several H. meleagridis cystine proteases have been identified and will be studied in this work.

**Dr. Brian Kiepper**

**Sustainable environmental management of water and by-products from poultry processing.** Research in water is focused both inside (i.e., water quality, use, consumption, conservation/reuse) and outside (i.e., stormwater management) of poultry slaughter and further processing plants. Focus is placed on the generation, assessment and treatment of poultry processing wastewater. Research in this area also includes the development of new technologies to improve by-product recovery from traditional poultry processing waste streams to develop value-added products while minimizing waste. Research in reducing environmental impact of wastewater effluents generated by poultry processing plants by increasing on-site treatment efficiencies is ongoing. One focus area of this work is in the recovery, purification and reuse of traditional waste fat sources as alternative fuels in processing plants.

**Dr. Kristen Navara**

**Hormonal Mechanisms of Offspring Sex Ratio Adjustment in Birds**

Currently, approximately 50% of chicks that hatch are killed in both the layer and broiler industries because they are the wrong sex. A method by which the sexes of offspring could be adjusted prior to ovulation would greatly benefit the poultry industry. Ongoing research is currently examining maternal stress and resulting stress hormone production as mediators of offspring sex ratios in two avian species, the zebra finch and the leghorn chicken. Exposures to long-term bouts of stress causes females to bias sex ratios towards females while acute exposure to stress hormones hours before ovulation causes sex ratio biases towards males. Comparison of these effects in two distantly related avian species will provide us with an idea of the relative conservation of the mechanisms involved and further hormonal manipulations in vivo as well as in vitro using a follicular culture system are being used to pinpoint the precise targets of sex ratio adjustment in birds. The ultimate goal is to identify an easy, non-hormonal treatment through which sex ratios can be skewed towards one sex or the other.
Poultry Internet Resources

This section will provide some useful websites to obtain useful information on poultry related topics and issues.

- UGA Poultry Science Department – [www.poultry.uga.edu](http://www.poultry.uga.edu)
- Poultry House Environmental Control – [www.poultryventilation.com](http://www.poultryventilation.com)
- Poultry Diagnostic and Research Center - [www.avian.uga.edu](http://www.avian.uga.edu)
- Poultry Ventilation and Housing – [www.poultryhouse.com](http://www.poultryhouse.com)
- US Poultry & Egg Association - [www.poultryegg.com](http://www.poultryegg.com)
- National Chicken Council - [www.nationalchickencouncil.com](http://www.nationalchickencouncil.com)

Poultry Science Faculty

**Sammy Aggrey**, Associate Professor
Poultry Genetics (Quantitative)

**Amy Batal**, Associate Professor
Poultry Nutrition

**Robert Beckstead**, Assistant Professor
Molecular Genetics & Developmental Biology

**Mark Compton**, Associate Professor
Undergraduate Coordinator
Biotechnology (Molecular Endocrinology/Immunology)

**Dan Cunningham**, Professor
Interim CAES Director of Homeland Security Management, Economics, Homeland Security

**Nick Dale**, Professor Emeritus
Poultry Nutrition & Feed Ingredient Quality

**Adam Davis**, Associate Professor
Poultry Physiology, Reproduction & Nutrition

**Claudia Dunkley**, Public Service Assistant
Nutrient Management & Poultry Management

**Brian Fairchild**, Associate Professor
Broiler Production

**Brian Kiepper**, Assistant Professor
Environmental Management

**Mike Lacy**, Professor
Department Head

**Joe Mauldin**, Professor
Hatchery & Breeder Management

**Larry McDougald**, Professor
Graduate Coordinator
Poultry Parasitology

**Kristen Navara**, Assistant Professor
Endocrinology, Reproductive Physiology, Molecular Biology

**Gene Pesti**, Professor
Poultry Nutrition
(Nutrient Requirements & Modeling)

**Casey Ritz**, Associate Professor
Poultry Waste Management & Poultry Production Management

**Scott Russell**, Professor
Poultry Processing (Microbiology)

**Bruce Webster**, Professor & Interim Extension Coordinator
Layer Management, Poultry Behavior & Welfare, Youth Programs

**Jeanna Wilson**, Professor
Breeder & Hatchery Management