

The Official Newsletter



DEPARTMENT OF
ANIMAL & AVIAN SCIENCES

fall



2011



New Aquaculture Lab

The department is pleased to announce the completion of its new aquaculture teaching laboratory. Expanding opportunities for hands-on learning by our students is a central theme in our strategic plan. This new teaching laboratory will allow up to 20 students the opportunity to gain hands-on-experience with an aquatic animal population, through a semester-long laboratory project in the ANSC 255 - Introduction to Aquaculture course taught by **Dr. L. Curry Woods III**. Each student is provided with their own population of Maryland's State Fish: the striped bass, which the students must manage as they compete with their fellow classmates to grow the fish in a sustainable manner throughout the course. The department appreciates the hard work **Dr. Woods** and **Dan Theisen** have done in planning, designing and relocating the aquaculture teaching laboratory.

Faculty News



The Department Welcomes Three New Faculty Members

ANSC is pleased to announce three new faculty members in the department.

Dr. Liqing Yu joins the faculty as an Associate Professor. He was an Associate Professor in the Department of Biochemistry and the Director of the Institutional Transgenic Mouse Core at Wake Forest University School of Medicine in Winston-Salem, North Carolina. Dr. Yu holds both M.D. and Ph.D. degrees. He practiced cardiology as a physician before turning to research. He has been working on lipid metabolism for more than 16 years. His focus is on lipid metabolism and metabolic diseases using genetically engineered mice and pharmacological agents.

Dr. Yu received his M.D. in 1985 from the Hubei Medical University at Xianning, China and his Ph.D. in 1995 in the Department of Pathology at the Chinese Academy of Medical Sciences and School of Basic Medical Sciences, Peking Union Medical College, China. He did postdoctoral training in the Department of Biochemistry, University of Alberta and was a Research Fellow in the Department of Molecular Genetics, University of Texas Southwestern Medical Center at Dallas.

Dr. Yu was at the Southwestern Hospital at The Third Military Medical University in Chongqing, China for many years, first as an Assistant Professor in the Department of Pathology, then as a Physician Resident and Assistant Professor and later an Attending Physician and Lecturer in the Department of Cardiology. He was also an Instructor at the University of Texas Southwestern Medical Center Dallas for four years.

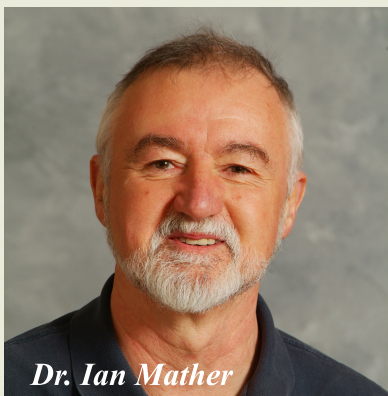
Dr. Byung-Eun Kim joins the faculty as an Assistant Professor. He was a Postdoctoral Fellow in the laboratory of Professor Dennis J. Thiele in the Department of Pharmacology and Cancer Biology at Duke University Medical Center, where he has been investigating copper metabolism in animals for the past five years. Dr. Kim received his Ph.D. in Genetics in 2004 from the University of Missouri-Columbia.

Dr. Debabrata Biswas joins the faculty as an Assistant Professor with a joint appointment in the Center for Food Safety and Security Systems. He received his Ph.D. in Bacteriology and Zoonotic Infection from the Department of Animal Resources Sciences at the University of Tokyo, Japan. His research focuses on construction of a novel Salmonella enteric serovar Typhimurium and *C. jejuni* vaccine against chicken colonization to make safer poultry products. (continued)

Faculty News

The Department Welcomes Three New Faculty Members Continued...

Dr. Biswas worked as a Clinical Microbiologist in the National Laboratory, Dhaka, Bangladesh. He was a Postdoctoral Fellow at Washington State University School of Molecular Biosciences for two years and a Postdoctoral Research Associate at the Vaccine and Infectious Diseases Organization (VIDO), University of Saskatchewan, Canada for three years. Prior to coming to Maryland, he was a Research Associate at the Center for Food Safety, at the University of Arkansas for two years.

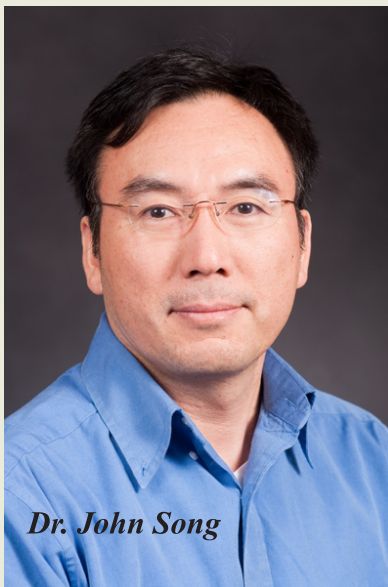


Dr. Ian Mather

Dr. Ian Mather, Professor Emeritus

Dr. Ian Mather has retired and been appointed as Professor Emeritus, effective September, 2011. Dr. Mather first joined the Department of Dairy Science in 1975 as an Assistant Professor. He became an Associate Professor in the merged Department of Animal Sciences in 1980 and became a full professor in 1985. Dr. Mather served as the Director of the Graduate Program from 2007-2011. He taught ANSC443 Biochemistry and Physiology of Lactation for many years. His research is in the area of cell and molecular biology of milk fat secretion. His principle research

focus has been devoted to the role that butyrophilin, a major protein in the milk fat globule membrane, plays in milk fat secretion. Dr. Mather was the first to sequence the gene for this protein and demonstrated that mice with a null mutation of butyrophilin were incapable of secreting milk fat. He remains the leading expert worldwide in the field of milk fat formation and secretion.



Dr. John Song

Dr. Jiuzhou "John" Song promoted to Associate Professor

Dr. Song joined the department in 2005 as an Assistant Professor and now has been promoted to Associate Professor with tenure. He received his Ph.D. from the China Agricultural University in 1996 and was awarded a postdoctoral fellowship at the Hebrew University of Jerusalem. Prior to that, he was a research fellow for three years at the Medical School of Indiana University. Most recently before coming to the University of Maryland, he was a Biostatistician and Bioinformatician at the University of Calgary for four years. Dr. Song's focus is on statistical genomics and bioinformatics. Please join us in congratulating Dr. Song!

Faculty News

Grants



Dr. Iqbal Hamza

Dr. Iqbal Hamza's one-year grant to the Roche Foundation of Anemia Research entitled "Genetic dissection of Heme Homeostasis in Animals" was funded for Swiss Franc 99,990 (which is about \$120,000.) Dr. Hamza along with **Dr. Rick Bruick** from University of Texas Southwest-Dallas also succeeded in getting a one-year NIH R21 grant entitled "High Throughput Screen Development for Modulators of Heme Transporters" funded for over \$158,000.



Dr. Carol Keefer

Adjunct Assistant Professor **Dr. Pierre R. Comizzoli** of the Smithsonian Institution has been named as a recipient of the Presidential Early Career Award. On September 26, 2011 President Obama named 94 researchers as recipients of the Presidential Early Career Awards for Scientists and Engineers, the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers. Dr. Comizzoli is also co-PI with **Dr. Carol Keefer** on a UMD-SI Seed Grant that was funding in year 1 of a joint Smithsonian-University of Maryland program



Dr. Ed Orlando

Dr. Ed Orlando was awarded a two-year \$112,000 grant from the Morris Animal Foundation to conduct a study entitled "Interactions between Environmental Progestins and Progesterone Receptors in the Fathead Minnow." Fish are highly sensitive to their environment and are often the first animal to show negative effects of exposure to pollutants or other environmental damage. Endocrine disruptors, chemicals that occur in both natural and manmade forms, can interfere with the endocrine system and affect reproduction and development in fish and other animals. Aquatic ecosystems contain mixtures of chemicals, including endocrine disruptors, which originate from waste-water treatment plants, agricultural fields and pens, residences, and aerial deposition. Some endocrine disruptors mimic natural steroid hormones, such as progestins. Progestins function through progesterone receptors and have critically important roles in reproduction. Currently, there are only a few published studies about the potential effects of environmental progestins. This study will determine whether these endocrine disruptors could interfere with progesterone-receptor signaling, which could have important effects on the reproduction and the robustness of fish populations. Data from this study will contribute to the understanding of the biological effects of altered progesterone-receptor signaling in wild fish. This research grant was written and submitted by **Drs. Edward Orlando and Jennifer (Farmer) Howard** and will be executed by **Drs. Orlando and Laura Ellestad**.

Faculty & Staff Cookoff!



The 2011 Faculty/Staff Cookoff

The annual Department of Animal and Avian Sciences Faculty/Staff Cookoff was held September 22, 2011. A big thanks to all the participants, as the food was delicious! When the beans were weighed, these cooks emerged victorious:

Main Dish

First Place: **Dr. Zhengguo Xiao** - "Poultry Science"

Second Place: **Jennifer Reynolds** - "Irish Whiskey Meatballs"

Third Place: **Dr. Carol Keefer** - "Chicken Salsa with Couscous"

Side Dish

First Place: **Sheryl Grey** - "Jammin' Patties"

Second Place: **Kiera Finucane** - "Scrumptious Snazzy Sausage Dip"

Third Place: **Sandra Nola** - "Apple Mallow Yam Yums"

Dessert

First Place: **Dr. Lisa Taneyhill** - "Chocolate-Peanut Butter Rice Krispies Treats"

Second Place: **Libby Dufour** - "Irish Pub Cake"

Third Place: **Janice Barber** - "Peanut Butter Cups"



Student News



Annual Symposium

The 25th Annual Symposium of the Department of Animal and Avian Sciences at the University of Maryland was held on June 16, 2011. This full-day event showcased our department's ongoing research as presented by our graduate students. This year's keynote speaker was **Dr. Yonathan Zohar**, Professor and Chair of the Department of Marine Biotechnology at the University of Maryland Baltimore County. Dr. Zohar's talk was entitled, "From physiology to industry- fish, crabs, and sustainable aquaculture."

Award Winners at the Annual Symposium 2011

The Shaffner Award for Poultry Research: **Ranga Padmanabhan**

The Shaffner Award for Poultry Research: **Qiong Hu**

Graduate Student Oral Presentation

First Place: **Jason Sinclair**

Second Place: **Ratan Choudhary**

Graduate Student Poster Presentation

First Place: **Emily Nestle**

Second Place: **Kara Duffy**

Research Assistant/Postdoc Presentation Award

First Place: **Dr. Tamika Samuel**

Second Place: **Dr. Monika Proszkowiec-Weglarz**

Outstanding MS Student of the Year: **José Carrillo**

Outstanding Ph.D. Student of the Year: **Diwakar Vyas**

Staff Member of the Year: **Kim Montague-Smith**



Kim Montague-Smith and Dr. Tom Porter

Student News

Annual Symposium Continued...

The effort that all of the graduate students and research assistants put into their posters and oral presentations was much appreciated. Also, the excellent leadership of the events co-chairs, **Dr. Ed Orlando** and **Dr. Amy Burk** and the efforts of the rest of the members of the Annual Symposium committee: **Clare Capotosto**, **Aaron Gough** and **Apratim Mitra** and the Social Events Committee, who kept us all fed: **Dr. Rick Kohn**, **Michael Mobley**, **Kim Montague-Smith**, **Sandra Nola**, **Dr. Tom Porter**, **Tim Shellem**, **Dr. John Song** and **Lindsey Vansandt** and to the undergraduate helpers: **Dan Bruce**, **Mac Campbell**, **Katie Gankos**, **Tal Lessor**, **Anna McGucken**, and **Becca Miller**. Special thanks to **Tim Shellem** for grilling and the ASGSA for the delicious kabobs. We are very grateful for the efforts and input of the judges: **Dr. Ioannis Bossis**, **Dr. Tony Capuco**, **Dr. Pierre Comizzoli**, **Stan Fultz**, **Dr. Budhna Pukazhenth**, **Dr. Nucharin Songsasen**, **Dr. Jennifer Timmons**, and **Dr. Yonathan Zohar** (who was also our wonderful keynote speaker).



Emily Nestle and Jason Sinclair won first place in poster and oral presentations, respectively.



Diwakar Vyas was awarded Ph.D. Student of the Year and José Carrillo was awarded M.S. Student of the Year.

Photos of all our Symposium winners can be viewed online at www.ansc.umd.edu/gallery

Student News

Emily Beall - Studying Abroad

ANSC Undergraduate, **Emily Beall**, traveled abroad for a veterinary internship in Costa Rica and Nicaragua this summer.

Read about her experiences at <http://ansc.umd.edu/students/spotlight/>

Undergraduate Update

Currently there are 271 students in the Animal Sciences undergraduate program, including 57 that are new freshman, transfer students and students that changed into our major this fall.

We wish the best of luck to alumni of the department who started vet school this fall:

Lena Binzer (Cornell), **Destiny Coleman** (UPenn), **William Goff** (NC State), **Alyson Gross** (UPenn), **Deanna McFillin** (LSU), **Lauren Mundy** (Ohio State), **Laura Noe** (Washington State), **Molly Pfeiffer** (VMRCVM), **Ashley Roller** (VMRCVM), **Danielle Wysocki** (VMRCVM)

Welcome our new Graduate Students!

New Graduate Students in Animal Science

Masters Students

Jose Almario – Rotation

Jennifer Colvin working with **Dr. Xiao**

Tyler Frankel working with **Dr. Woods**

Marie Iwaniuk working with **Dr. Angel**

Shen Li –Rotation

New Ph.D. students

Jose Carrillo working with **Dr. Siewerdt**

Ankita Shah working with **Dr. Taneyhill**

Jainbing Zhang working with **Dr. Hamza**



Emily Beall

Extension News

2011 Maryland State Fair Dairy Judging Contest

Complete contest results from the 2011 Maryland State Fair Dairy Judging Contest, coordinated by the department's **Kiera Finucane**, as well as the All-American Invitational Dairy Judging Contest in Harrisburg, Pennsylvania are posted on the Animal and Avian Sciences' Dairy Extension page: <http://ansc.umd.edu/extension/dairy/4h/index.cfm?directory=judging.cfm>

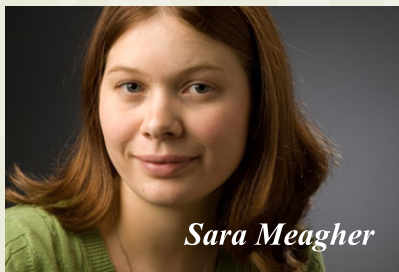
The Maryland 4-H Team was the top team in the Harrisburg contest as well as the High Team in Oral Reasons. Congratulations to **Lizzie Davis** of Carroll County, **Elizabeth Davis** of Cecil County, **Ryan Zimmerman** of Montgomery County, **Maggie Buckmeier** of Frederick County and coach **Bill Schnebly** of Washington County.

International Dairy Judging

On June 22, 2011 the winning team of the 2010 National 4-H Dairy Cattle Judging Contest headed to Scotland to compete in an International Judging event. The team brought Maryland its 30th National victory, which is an incredible feat. With that honor comes an opportunity to represent Maryland at an International judging contest, for which they raised \$30,000 to make the trip. The team consisted of **Kaitlyn Corbett**, Washington Co.; **Hannah Hood**, Frederick Co.; **Jessica Sentelle**, Frederick Co.; and **Jason Zimmerman**, Montgomery Co. The program is coordinated by **Kiera Finucane**, Animal and Avian Sciences, and this year's team was coached by **Jeff Semler**, Extension Educator in Washington County with University of Maryland Extension.

The team traveled through Scotland, England, France, Luxembourg and Germany over the fourteen-day trip. They judged cattle in multiple countries including the Royal Highland Show in Scotland and the Luxembourg National Show, saw a play in London, and took a cruise down the Rhine River. The team was invited to lead cattle in an international cattle sale hosted by the Luxembourg Herd Book Association. The team appreciated the support they received during their fundraising for the trip. The program's long-term success and viability is possible only through the time, effort and financial support of the entire dairy industry in Maryland. For more information on the 4-H Dairy Program in Maryland, please contact Kiera Finucane at (301) 405-1392 or kieraf@umd.edu.

Alumni News



Sara Meagher, ANSC Alum (2010), accepted a position as Faculty Extension Assistant, with a focus on agriculture, at University of Maryland Extension-Harford County in September, 2011. Sara was a teaching assistant in ANSC 232 Horse Management for three years and a student extension assistant for several years. After earning her B.S. in Animal Sciences, Sara earned her M.S. in Extension Education from the University of Maryland.



Sarah Peitzmeier who worked in **Dr. Ian Mather's** laboratory and graduated from the University of Maryland with B.S. in May 2010 is studying for the MPH degree at Johns Hopkins University and is currently in Banjul, the Gambia, West Africa assisting in a public health project to reduce the transmission of HIV infection and AIDS



Nicole Fiorellino, former M.S. graduate student (2010) of **Dr. Amy Burk**, used her **Dr. Joseph Soares Graduate Student Travel Award** to present some of her Master's thesis research at the Equine Science Society in May, 2011. She received 3rd place (out of 16) in the graduate student competition. Nicole is currently pursuing her Ph.D. in environmental science under the direction of **Dr. Josh McGrath**.



Dr. JaeKwang Jeong graduated with a Ph.D. degree through the MOCB Program in May, 2011 while working with **Dr. Ian Mather**, and is now a post-doctoral fellow with **Dr. John Wysolmerski** in the Medical School of Yale University.

ANSC Alum **Dr. Ashley Peterson** who received her Ph.D. in 2006 with **Dr. Rick Kohn**, joined the National Chicken Council (NCC) staff as Vice President of Science and Technology in August, 2011. Dr. Peterson was the Vice President of Government Relations for the United Egg Producers (UEP). Prior to that she was a Congressional Science Fellow in the U.S. House of Representatives, working on agriculture, energy, and environment issues. Dr. Peterson earned her Master of Science in Animal Science from Michigan State University, and her Bachelor of Science from the University of Kentucky.

Donate to the Department

Times are tough, and State support for our department continues to decline. If you have the means and the desire, please make a commitment to supporting the teaching mission of the Department of Animal and Avian Sciences by donating to any of the funds below. No matter what the amount, your gift will make a difference and help to preserve the quality of education provided by the Department of Animal and Avian Sciences at the University of Maryland.

There are **THREE** different funds to which you can make your contribution:

1. **Animal Sciences Undergraduate Student Fund** - Code: 20095 “Animal & Avian Sciences Fund”

<https://advancement.umd.edu/giving/addToGiving.php?Fund=9b04d152845ec0a378394003c96da594>

Contributions to this fund go toward scholarships and educational materials for our undergraduates. Scholarships provide critical support for talented students who have low to moderate financial means, putting a college degree within their reach.

2. **Animal Sciences Graduate Student Fund** - Code: 30611 “Animal & Avian Sciences Department Scholarship Fund”

<https://advancement.umd.edu/giving/addToGiving.php?Fund=5737c6ec2e0716f3d8a7a5c4e0de0d9a>

Presenting their research at national meetings is a crucial part of the development of graduate students toward their degrees and career goals. Contributions to this fund go to support travel to national meetings and educational materials for our graduate students.

3. **Animal Sciences Campus Farm Fund** - Code: 21723 “Animal Sciences Campus Farm Fund”

<https://advancement.umd.edu/giving/addToGiving.php?Fund=5737c6ec2e0716f3d8a7a5c4e0de0d9a>

Contributions to this fund go toward supporting the Campus Farm, the focal point of our undergraduate program activities. Located immediately across Regents Drive from the Animal Sciences Building, the Campus Farm occupies approximately 3.4 acres of land and houses various livestock and poultry used extensively in teaching laboratories. Support through this fund will ensure that the campus farm can continue to serve as a valuable resource for our students for the foreseeable future.

Donate to the Department - continued

HOW TO DONATE

Every contribution to the Department of Animal and Avian Sciences is appreciated and makes a difference. We thank you for your support! Donations can be made in the form of a check or online by credit card ([see website for details](#)).

Donating by Check

When writing a check, please make it payable to “UMCP Foundation” and please be sure to specify the CODE number for the fund you wish to donate to. Checks can be mailed directly to the department at:

Department of Animal and Avian Sciences
1413 Animal Sciences Center
University of Maryland
College Park, MD 20742-2311

Attention Alumni!

Want to stay up to date with ANSC happenings?

Click Here to join our mailing list!

The Department of Animal & Avian Sciences
University of Maryland
Office: (301) 405-1366
Fax: (301) 405-7980
ansc@umd.edu
www.ansc.umd.edu