In recognition for her perfect 4.0 grade point average, Claire Harrington won UMW’s highest academic honor for its graduating seniors, the Colgate Darden Jr. Award. Three students shared the award this year. In addition to her academic success as a biology major, Claire was a Washington Scholar and member of the Chi Beta Phi and Alpha Phi Sigma honor societies. Claire completed an independent research project under the guidance of Dr. Rosemary Barra. Beyond the classroom, Claire was a pole vault standout for UMW’s track and field team and set the Capital Area Conference indoor record in that event. According to Dr. Barra, “Claire was an excellent research student. She was dedicated to her project and was fun to have in the lab. She did it all – balancing her academic work with many extracurricular activities including her role as Captain of the Women’s Track and Field team.” On top of her Darden Award, Harrington was the recipient of the William A. Castle Award, which is the department’s annual outstanding graduating senior award. After being accepted to a remarkable five different medical schools, she is now a University of Virginia medical student.

NEW FUNDING YIELDS BUMPER CROP OF SCHOLARSHIP RECIPIENTS (CONTINUED ON PAGE 2)

Each year, the department awards one Rebecca Culbertson Stuart Scholarship and two Biology Scholarships. Each is worth about $4,000, and the recipients are chosen by the faculty based on their grade point averages, extracurricular activities, and educational and career aspirations.

Kristina Krumpes is this year’s winner of the Stuart Scholarship. In addition to her classroom achievements, Kristina has immersed herself in research, completing an internship with the Smithsonian Tropical Research Institute in Panama and two summers as a Summer Science Institute (SSI) participant. Under the mentorship of Dr. Steve Gallik, she won the best poster award during last summer’s SSI Symposium. Additionally, Kristina has taken on a number of leadership roles for various student organizations, including President of Chi Beta Phi and the Pre-med Club. She also serves as a chemistry tutor for the PASS program. Upon graduation, Kristina plans to pursue an M.D. and a Ph.D. in biomedical engineering.

This year, the department awarded the Irene Piscopo Rodgers Fellowship II for the first time. The scholarship was earmarked to support students’ summer research. Kristina Krumpes and Meagan Darling shared the fellowship. Meagan is working with Dr. Parrish Waters to better understand the physiological effects of social status in mice, including relationships between dominance interactions and stress hormones. She participated in last summer’s Summer Science Institute and previously conducted research through Elon University’s College Fellows Winter Term program.

Claire Harrington, Class of 2015.

Kristina Krumpes won the Rebecca Culbertson Stuart Scholarship.

Meagan Darling joined Kristina Krumpes in winning a Piscopo-Rodgers Fellowship II to support her summer research.
SCHOLARSHIP WINNERS (CONTINUED)

Viraj Munshi and Rachel Thomas each won a Biology Scholarship. Both Rachel and Viraj are part of a research team sponsored by Dr. Steve Gallik examining the mechanics of protein transport into and out of cellular nuclei. Viraj is a member of the Premed Club, Chi Beta Phi, and Biology Student Association and has amassed an extensive record of volunteer work at the Moss Free Clinic and INOVA Hospital. He plans to pursue a career in surgery and medical research. Rachel is also a member of the Premed Club and Chi Beta Phi. Her career goal is to become an orthopedic surgeon. “This scholarship will allow me to focus on achieving my goal of becoming a doctor by helping with the financial aspect of my education,” said Thomas.

Maggie Magliato was awarded the Thyra Valade Conservation Leadership Scholarship. Maggie is a double major in biology and environmental science, and she plans to pursue a conservation biology career in Central America. Maggie has volunteered and interned for Tree Fredericksburg and the Virginia Bluebird Society. She is a member of the President’s Council on Sustainability and is the Biology Student Association’s Vice President.

Kit Qualls won the Debra Stanley Leap Scholarship, which was awarded for the first time this year. Kit is the President of the Biology Student Association and is also a member of Dr. Gallik’s research team. Additionally, she interned for NASA on a project studying the physiological demands faced by pilots. She is interested in a career in drug development.

THE DEPARTMENT WELCOMES TWO NEW FACULTY MEMBERS

The department is pleased to welcome new Assistant Professor, Dr. April Wynn. She holds a M.S. degree in Higher Education from Texas A&M University and a Ph.D. in Genetics from North Carolina State University. Dr. Wynn is a plant geneticist by training and is interested in research examining the intersection of genetic regulatory networks for seed formation with plant response to environmental stress. Working on a family of genes responsible for flower formation and ovule (seed precursor) development is exciting work, especially when the genes are named after Dr. Wynn’s favorite childhood book author Dr. Seuss! Using the model plant system, Arabidopsis thaliana, Dr. Wynn aims to understand the effects of environmental conditions on ovule size and development. Previously, she worked at St. Mary’s College of Maryland where she taught plant physiology, genetics, and molecular biology. At UMW, Dr. Wynn will teach Biological Concepts (Biol 121), The Research Process (Biol 260), Plant Physiology (Biol 312), General Genetics (Biol 341) and a variety of other topical plant courses.

We are also happy to re-introduce Dr. Parrish Waters, our second new Assistant Professor. Dr. Waters holds a Ph.D. from the University of South Dakota. His major area of expertise is neuroscience, but his physiology interests are broad. Most recently, he held a 2-year Postdoctoral Fellowship in the NeuroCore Cluster of Excellence at Charité Medical University in Berlin, Germany. Before that, he was a Postdoctoral Fellow at both the College of Charleston and the Medical University of South Carolina. He also served as lecturer for a variety of biology courses at the University of North Carolina, Asheville. He will teach human anatomy, human physiology, and introductory biology for us this academic year. We are glad to have Dr. Waters with us.
UMW TO HOST THE COMBINED ANNUAL MEETINGS OF THE VIRGINIA JUNIOR ACADEMY OF SCIENCE AND THE VIRGINIA ACADEMY OF SCIENCE IN MAY 2016

UMW will be awash with scientists of all disciplines May 17-20, 2016. Approximately 1000 members of the Virginia Junior Academy of Science (VJAS) and the Virginia Academy of Science (VAS) will present the results of their scientific research at the combined annual meetings held for the first time at UMW. Members of VJAS include students from middle school to high school and their teachers, and students compete for over $90,000 in cash awards and scholarships. The VAS brings together research scientists from colleges and universities around Virginia to present their research. Guest speakers will give presentations in their field of expertise. Interested scientists of all levels are invited to serve as judges for VJAS and judges may attend the meetings for free (we also feed you!).

UMW’s Department of Biological Sciences has maintained a consistently strong leadership presence in the VAS. Dr. Rosemary Barra, Dr. Michael Bass, O’Dell, and Wieland have all served as President of the organization, and many students have won research grants, including senior Lyle King (pictured right). This VAS meeting will be the first hosted by UMW since the late 1960s.

DR. ANDREW DOLBY WINS SERVICE AWARD FROM THE VIRGINIA SOCIETY OF ORNITHOLOGY

At this year’s Annual Meeting of the Virginia Society of Ornithology (VSO), Professor Andrew Dolby was awarded the 2015 Eike Award for his outstanding service to the Society. Dr. Dolby became active with the VSO soon after his arrival at Mary Washington. He served on its Board of Directors from 2005 to 2008; he served as Vice President from 2009 through 2011, as President from 2011 through 2013, and as Past President from 2013 to the summer of 2015. Dr. Dolby began making significant contributions to the VSO in 2004 when he served as Research Committee Chair and organized the Northern Neck Bird Survey. Over the next four years he coordinated four additional surveys: Russell and Wise Counties in 2005, Virginia State Park System in 2006, Northern Saw-whet Owls in 2007, and in conjunction with the Virginia Department of Game & Inland Fisheries, the Riparian Area Breeding Bird Foray in 2008. His reports of the first four surveys can be found in The Raven, Journal of the Virginia Society of Ornithology, and were presented to both the VSO and the Virginia Academy of Science annual meetings. Dr. Dolby also organized and managed two successful VSO Annual Meetings—Fredericksburg in 2009 and Chesapeake in 2014.

In addition, Dr. Dolby has organized the scientific papers’ sessions of five different VSO Annual Meetings. As President of VSO, he also chaired the Society’s Annual Meetings in 2012 and 2013. Dr. Dolby currently serves as Editor of The Raven.

“It’s been my pleasure to serve the VSO. It is a model organization that brings together professional ornithologists, wildlife managers, and engaged citizens who all share a common interest in studying and protecting Virginia’s birds,” said Dolby. The award is named in honor of James Eike, a member of the VSO from 1933 until his death in 1983.

Dr. Andrew Dolby in the Galapagos Islands

Eike’s long and faithful service, his dedication, and his enthusiasm in promoting the work of the VSO gave him a unique status in the organization. Congratulations, Dr. Dolby!

Faculty Notes

- Dianne Baker co-authored two presentations with international colleagues at the 9th European Zebrafish Meeting in Oslo, Norway in July: a. “Cxcr4a expression during medaka embryogenesis” and b. “Kiss 1 and Gpr54-1 during embryogenesis in medaka.”

- Theresa Grana welcomed a new baby boy, Isaac Benjamin, in April.

- Alan Griffith published a paper with Michael Crawford (’14) and Stephen Davies (Computer Science) titled “Predicting metapopulation responses of a tidal wetland annual to environmental stochasticity and water dispersion through an individual-based model.”

- Deborah Zies presented a poster titled “Teaching molecular biology as a research intensive course.” at the Gordon Conference on Undergraduate Biology Education Research held at Bates College in Lewiston, ME in July.
I graduated from UMW in May of 2011. Mere weeks later on June 1, 2011 I was living in NYC and starting my graduate studies at Columbia University to become a Nurse Practitioner. I have to admit I was rather nervous and intimidated. However, once I started classes, I realized that my education at UMW had prepared me to not only succeed, but to excel! While at UMW, I was fortunate enough to work with Dr. Baker on an original research project. My strong base in biology mixed with my unique background in research made my very heavy course load seem much lighter. Not only did my research experience help me in school, but it continues to serve me daily. Medicine is an evidence-based profession. That means the healthcare provider must read or conduct original research, find the strengths and weaknesses of each study, and then decide how to implement that information into her daily practice. Thanks to UMW, I am competent and comfortable with this process.

To become a Nurse Practitioner, you need to have a Bachelors in Nursing and then you continue onto your Master's. So, since I had a biology degree, I had to complete a second Bachelors in Nursing, which I completed a year later in May 2012. (For anyone interested in nursing, many of these accelerated second degree programs are available.) I earned a job as an RN, took a year off from school, gained experience, returned to Columbia, finished my Masters in December 2014, and to top it off at the graduation ceremony this past May, I received a special award from the Dean.

I am now working as a Family Nurse Practitioner in the Women's Sports Medicine Center at the Hospital for Special Surgery in NYC, the number one ranked hospital for orthopedics in the US. Soccer has always been an integral part of my life, especially during my time at UMW. So to me, Sports Medicine was the best way to combine my two passions. Four years after graduating from UMW, I can truly say that I have my dream job. Columbia undoubtedly contributed to this achievement, but I believe the majority of the credit belongs to UMW.

"...I realized that my education at UMW had prepared me not only to succeed, but to excel!"

-Sarah Tryon, Class of 2011