

Monarch Science OBSERVER

Fall 2020, Volume 7



ODU

College of Sciences

Congrats December Grads

LET US RECOGNIZE OUR DECEMBER 2020 GRADUATES

CONGRATULATIONS TO EACH OF YOU FOR ALL OF YOUR HARD WORK!

**OUTSTANDING
SCHOLAR &
ARMY RESERVIST**

**COMPUTER SCIENCE
GRAD KNOWS
PERSISTENCE IS KEY**

**STELLAR
FACULTY &
STAFF**

Message from Dean Dodge

Our unusual fall semester will soon come to a close. All of our classes are online now (after Thanksgiving) to prevent traveling students from coming back to campus and spreading covid in our community. Despite the many challenges, I think there is a lot of positive news to share. For one thing we have many awesome students who will graduate this December. You will read about a few of them in this newsletter, including Amy Zonts, who was selected as the Alumni Association's Outstanding College Scholar for the College of Sciences.

Another positive outcome from the fall semester is that we were able to engage with students in new ways. One example is our online "Lunch and Learn" series, in which alumni and friends of the college talk with students via zoom about their careers and offer professional advice. You will see some information about this series in the newsletter. If you are interested in doing one of these sessions, please email me at gdodge@odu.edu.

Research has been dramatically affected by the pandemic. Most of our researchers were able to get back in the lab over the summer with decreased occupancy of labs, increased cleaning and consistent use of personal protective equipment. We have found ways to work safely with graduate students and even undergraduate researchers. We were also excited to find so many of our faculty on the list of the top scientists in the world! A list is included in the newsletter.

One area of concern is that many of our students are suffering financially due to the pandemic. We have established a scholarship fund particularly dedicated to helping students with covid-related financial challenges. If you are able to contribute to that fund, we would be very grateful. Please consider making a donation to that fund at this [link](#).

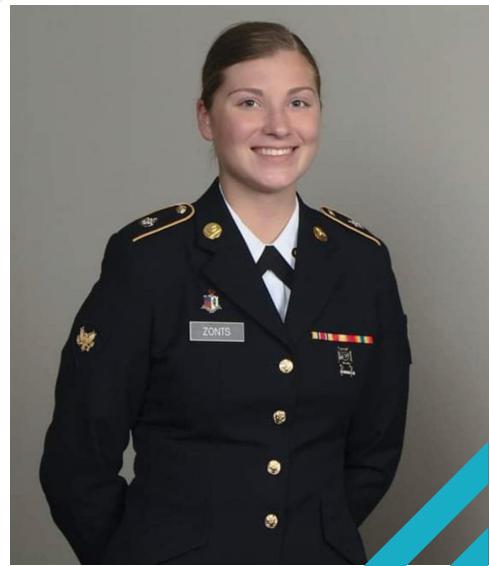
I hope you and your family have a safe and relaxing holiday.

Go Monarchs!
Gail



Outstanding Scholar December 2020 Graduate

Army reservist and first-generation student, Amy Zonts will receive a Bachelor of Science in Biological Sciences in December 2020. Moreover, she will receive the "Outstanding Scholar Award" in the College of Sciences too. "I feel honored," said Zonts. "This shows that perseverance, having discipline, and the will to learn can help overcome adversities that may be standing in your way." Her personal connection to biology started in her childhood.



Amy Zonts,
Biological Sciences Student

"Methicillin-resistant Staphylococcus aureus (MRSA) was something I wanted to research because my mother caught the pathogen and was hospitalized when I was young," said Zonts. While attending Old Dominion University, Zonts has been able to conduct meaningful research about MRSA in a micro laboratory course. "The research I performed was specifically on the virulence factors on MRSA to explain how it has become such a dangerous, infectious "superbug"," said Zonts. She has learned more about how MRSA can mutate rapidly and has antibiotic resistant genes. "It is important to acknowledge that we need to study how these pathogens work to come up with alternative solutions for fighting them in hospital environments," said Zonts.

In addition to taking a full load of classes each semester, Zonts has worked a full-time job and is a member of the Army Reserves. "I have found effective study strategies that work for me," said Zonts. "While it's challenging, my passion for biology has helped me want to learn the material and succeed." She deems ODU to be a reputable institution that is extremely military friendly with very helpful staff, who are ready to answer questions. Read the full article [here](#).

Double Major & Diversity in Mathematics

Add two double majors and two double minors and you get one December 2020 graduate. Justin Gausin double majored in Applied Mathematics and Cyber Security and double minored in Computer Science and Information Systems & Technology.

"I believe the most difficult hurdle in my time being a double major and a double minor was planning to finish my curriculum in the least time possible," said Gausin. That meant Gausin had to carefully plan his class schedule and work-life balance.

"Starting sophomore year, I believe I took 16-18 credit hours for each regular semester (fall and spring)," said Gausin. Read the full article [here](#).



Photo: Justin Gausin
Mathematics & Cybersecurity December 2020 Graduate

Congrats December 2020 Graduates



Photo: Angelos Angelopoulos
Computer Science December 2020 Graduate

[Click here to watch
Angelos's video
“Persistence is Key”](#)



When COVID-19 forced Old Dominion University to quickly pivot to remote learning in Spring 2020, Physics senior Isaiah Richardson's laboratory research stopped. "ODU shut down in March, so I could not go to ODU and complete the senior thesis experiment," said Richardson. Although he could have simply reported progress to date and closed out the project that spring, Isaiah instead chose to continue working on the research and resumed his experiment when the lab reopened in the Fall. Time has always captivated Richardson and he used his last semester to acquire additional data for his thesis and to fully prepare for his future in physics.

"Time travel was actually the original reason why I chose to pursue physics," said Richardson. He understands the skepticism behind it. A lot of people just say, "it's impossible" or "it has paradoxes so it cannot work" and write time travel off. Read the full article [here](#).



Photo: Isaiah Richardson
Physics December 2020 Graduate

ODU Scientists Receive Top World Ranking

Congratulations to the following College of Sciences faculty for being recognized in the Stanford University World ranking of scientists. The ranking represents the top two percent of the most-cited scientists in various disciplines.

Ian Balitsky, Physics
P. F. Bernath, Chemistry & Biochemistry
David J. Burdige, Ocean & Earth Sciences
Thomas F. Cash (Retired Psychology)
G. T. Csanady (Retired OES Emerita)
G. A. Cutter, Ocean & Earth Sciences
Daniel M. Dauer (Retired Biological Sciences)
Tal Ezer, Ocean & Earth Sciences
Thomas B. Gatski (Retired OES)
A. Gurevich, Physics
H. Rodger Harvey, Ocean & Earth Sciences
Patrick G. Hatcher, Chemistry & Biochemistry
E. E. Hofmann, Ocean & Earth Sciences

Fang Q. Hu, Mathematics & Statistics
Cynthia M. Jones, Ocean & Earth Sciences
John Klinck, Ocean & Earth Sciences
James W. Lee, Chemistry & Biochemistry
Li-Shi Luo, Mathematics & Statistics
Jingdong Mao, Chemistry & Biochemistry
Kenneth Mopper, Chemistry & Biochemistry
Nora Noffke, Ocean & Earth Sciences
Stephan Olariu, Computer Science
A. V. Radyushkin, Physics
R. Schiavilla, Physics
C. Simpson (Retired OES)
John W. Wilson, Mathematics & Statistics
George T.F. Wong (Retired OES)

*Ocean & Earth Sciences (OES)

Igniting Passion with a Ph.D. in Chemistry

Aleksandar "Alex" Goranov, a Doctoral Ph.D. candidate in Chemistry, will complete his journey in December 2020. Originally from Bulgaria, Goranov came to America to attend college. After an extensive search including 150 universities and with four Ph.D. offers on the table, Goranov committed to ODU. "I chose ODU because I found an advisor here whose research interests aligned perfectly with mine, and we both shared the same vision for science and what a successful Ph.D. experience is," said Goranov.

Goranov's advisor is Dr. Patrick G. Hatcher, Batten Endowed Chair of Physical Sciences and Professor of Chemistry and Biochemistry. "I don't know enough words in English (nor in Bulgarian, my native language) to describe my gratitude to him for his excellent guidance throughout my Ph.D. degree," said Goranov. "He allowed me to grow, to gain confidence, to make mistakes and learn from them, and to become a person and researcher both of us would be proud of."

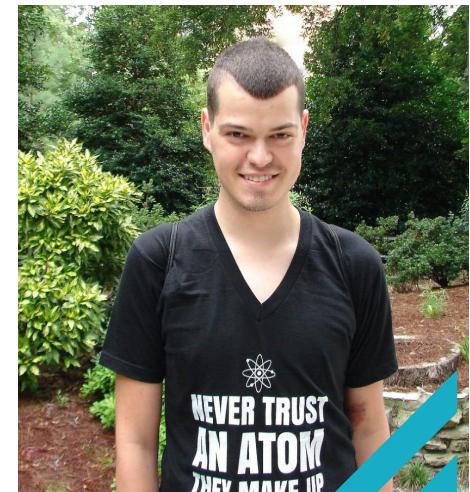


Photo: Alex Goranov
Chemistry December 2020 Graduate

Goranov has had the opportunity to delve deeper into his research interest which is studying the compounds produced by forest fires (also known as "black carbon"). The exact name of this scientific field is "wildfire biogeochemistry". Read the full article [here](#).

Lunch & Learn Speakers

Thank you to each alumnus and participant for taking the time to zoom with current Monarchs about the various topics below.



L-Noelle Gabriel, M.D.
Biology Alumnus
Pediatric E.R.
Case Study:
What did you swallow?



R-Richard Giacalone
Psychology Alumnus
A Career in Mediation



L-Myles Pocta
Oceanography Alumnus
Environmental Professions
Technologies &
Opportunities



R-Greg Bockheim
Wild About Animal
Conservation
Executive Dir. of VA Zoo



L-Lynn B. Clements
Biology Alumnus
Wild About Animal
Conservation

If you're interested in presenting at a
Lunch & Learn in 2021 contact
James Brunelle,
Chair of the COSAdvisory Board
at jabrunel@odu.edu.

Science Alumni Reign On



Photo: Kathy McCormick, Physics Ph.D.

Kathy McCormick is an accomplished expert in nuclear physics whose work has taken her all over the globe, but her love for physics took on a new meaning after she received a Ph.D. in Physics from Old Dominion University. "After I graduated, I was a visiting researcher in France at the Centre Energie Atomique outside of Paris," said McCormick. Her world changed after the terrorists' attacks on September 11, 2001, and she felt compelled to help the country using her expertise. Read the full article [here](#).



Photo: Carly York, Biology Ph.D.

A love for squids brought alumnus Carly York to Old Dominion University for her Ph.D. in Biological Sciences and set her on a path to inspire the next generation of women scientists. "Cephalopods are incredible because they are aliens on earth and have been on this earth for 500 million years making them extremely successful at surviving adversity," said York. That passion bloomed and led York back to ODU to get a doctorate in Biology. Read the full article [here](#).

Lunch and Learn NASA Panelists



Laura Judd
NASA Langley
Research Center



Marilee Roell
NASA Langley
Research Center



Jamie Nehrir
NASA Langley
Research Center



Laura Rogers
NASA Langley
Research Center

Stellar Staff



Gabriel Franke,
Assistant to the Dean of College of Sciences

During an election, "We the People" vote and help carry out elections. For 20 years, Gabriel Franke, assistant to the Dean of College of Sciences, has been an active participant in civic life in the city of Norfolk. She has held various positions during elections starting off as an election poll worker. After four years she became Assistant Chief and held the position as Chief in Norfolk for the last 14 years. A poll worker sets up the polling place, verifies voter information, assists voters, and safeguards voting equipment and the polling place for citizens. Also, the poll worker assists the Chief and Assistant Chief with tabulating the results for the polling place. "As an Assistant Chief, I answered poll worker questions about what do to in unusual situations, assisted the poll workers with using the equipment and keeping the equipment going. Read full article [here](#).



Tilghman Williams,
IT/Graduate Program Coordinator

Tilghman Williams, Jr. served 24 years as a Dental Technician Chief Petty Officer in the U.S. Navy. His Navy experience in equipment repair led him to pursue an opening at ODU in 1998 in the College of Health Sciences, School of Dental Hygiene. On May 10, 1998 he started as a fiscal technician. He was also a supply technician and eventually an equipment maintenance technician. Williams spent 10 years at the School of Dental Hygiene before transferring over to the College of Sciences, Deans Office to serve as the IT/graduate program coordinator. He has been responsible for processing all hiring documents from all seven departments in the COS. All tuition waivers for the graduate workers have been processed by Williams. He also took on the role of the Dean's office photographer and the College of Sciences web page editor up until 2019. Williams will retire at the end of this year.



Both Reneldo and Kerri were selected by the ODU Advising Network (ODAN) Awards Committee. They have been encouraged to apply for the National Academic Advising Association (NACADA) Region 2 Award. National winners will be announced in March 2021.

Reneldo Randall,
Director of Advising
2020-2021 Advising Administrator Award



Kerri Svoboda-Musick,
Academic Advisor, College of Sciences
2020-2021 New Advisor Award

Monarch Science Observer

ODU College of Sciences Newsletter

Contact Us

Dean Gail Dodge
757-683-3724
gdodge@odu.edu

Tiffany Whitfield
757-683-5826
Strategic Communications and Marketing Coordinator
tlwhitfi@odu.edu

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