



Department of Biology Updates

Dear Alumni and Friends of the Biology Department,

Welcome to our latest issue of the Biology Department newsletter. We have two issues per year, Spring and Fall, in which we hope to keep you up-to-date on departmental activities and achievements. In turn, I encourage you to drop us an e-mail and let us know about any news and developments in your life and career (BiologyDept@luc.edu).

Regardless of the current challenges we are all facing as a result of COVID-19, the department continues to flourish with 1600 majors and about 400 graduates this year. Our graduates pursue a variety of careers in academia, medical sciences, and industry. We are working to increase undergraduate research opportunities, including a summer research program supported by 13 Biology Summer Research Fellows and three two-year Biology Research Fellowships funded using departmental allocations, including the Biology Gift Account. Generous alumni have helped so that the research stipends will be raised for the first time in many years. Faculty have been working hard to transition their research activities with students into an online format, involving literature review, proposal writing, and bioinformatic analyses. We continue seeking broader and deeper connections with the Health Sciences Campus' Nursing and Medical Schools and have several students who have co-mentorships between Stritch School of Medicine and the Lakeshore Campus.

Department faculty members have been very successful in obtaining extramural support for their research. We currently hold grants totaling \$5 million dollars. These funds make for even more active research for our students to participate in.

We welcome Tony Siko the new Assistant Director of the Animal Care Facility along with the new facility Director, Dr. Lee Cera. Dr. Cera is a veterinarian and head of the Department of Comparative Medicine at the Stritch School of Medicine. This new arrangement will bring the Animal Care Facility and its leadership in line with the Medical School practice and other changes in animal care over the years.

We have three faculty retiring this academic year. Dr. Barbara Haas, Senior Lecturer, has retired as of December after working at Loyola for more than 30 years. Lately, she has concentrated on teaching freshman biology. We also have two faculty retiring at the end of the Spring semester, Dr. Warren Jones, Associate Professor, and Dr. Howard Laten, Professor. Each have worked at Loyola for 40 years. We are very grateful to these long time faculty members for all they have given to Loyola and to our students. They will be missed by students and their colleagues.

We have two new faculty members who joined the department this past year, Dr. Yoel Stuart and Dr. Caroline Turner. Dr. Stuart is an evolutionary biologist interested in speciation and parallel evolution. He uses *Anolis* lizards and stickleback fish as his study systems. Dr. Turner joined the department this January. She is an evolutionary microbiologist working on adaptation using evolutionary experiments in *E. coli*. We welcome them to our faculty.

We have been searching for three new Lecturers this academic year. Dr. Helena Palka-Hamblin is a Cell Biologist who received her PhD from Northwestern University and worked for many years as a researcher at the University of Illinois Chicago before joining Loyola and serving as an Instructor over the last three years. She will organize and update our Cell Biology Laboratory course. Dr. Molly



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Staley received her PhD from Auburn University and then worked as a postdoctoral researcher at Brookfield Zoo. She has been working in the department as an Instructor for the past two years and will hold a Lecturer position in Anatomy & Physiology. Finally, we have hired Dr. Shauna Price as a Lecturer in General Biology. We are grateful that these faculty are joining us on a continuous basis.

As we head into the Summer and look ahead to the upcoming Fall semester, we are all doing our best to prepare for every eventuality. While the University has not made a determination regarding in-person classes in the Fall, an announcement is anticipated sometime in June. Our faculty and staff are working hard prepare lessons for online or hybrid courses if needed, with the same rigor and dedication to student outcomes as in-person courses.

Best wishes,
Jim Cheverud

Faculty Research Awards

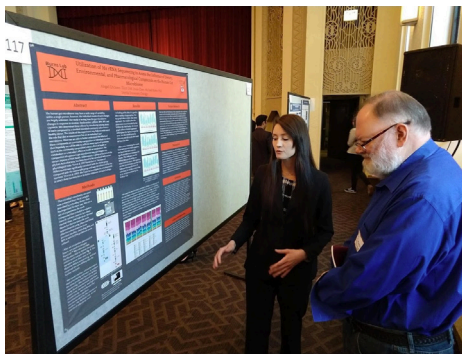
Professor Terry Grande was recognized for her work published in 2018 in *Copeia*, the premier journal for the American Society of Ichthyologists and Herpetologists. A committee of peers presented her the 2018 Best Paper in Ichthyology for her work*. It reflects very well on the Biology Department and Loyola University that we have such high-caliber researchers in our labs and classrooms.

*Terry C. Grande, W. Calvin Borden, Mark V. H. Wilson, and Lindsay Scarpitta (2018) Phylogenetic Relationships among Fishes in the Order Zeiformes Based on Molecular and Morphological Data. *Copeia*: March 2018, Vol. 106, No. 1, pp. 20-48.



Professor Terry Grande, recipient of 2018 Best Paper in Ichthyology in *Copeia*

Loyola Undergraduates Present at Weekend of Excellence and Receive Research Fellowships

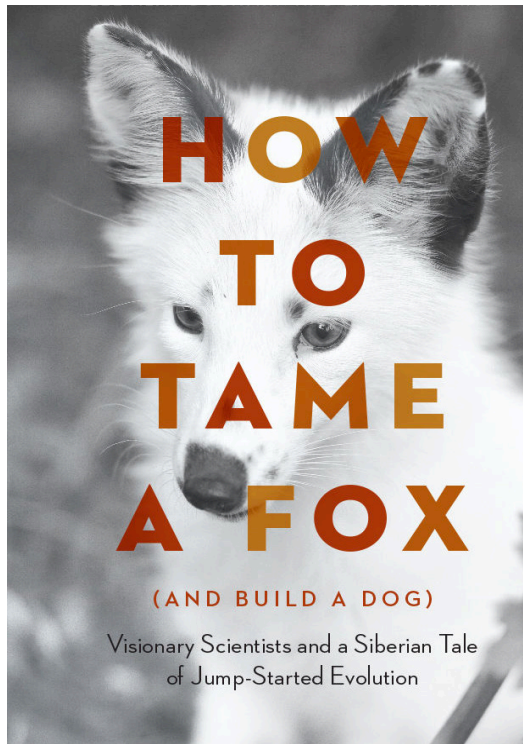


Biology Department Senior, Abigail Erickson, presents her research at the 2019 Weekend of Excellence

Each year, undergraduate students who are performing research projects at Loyola are able to apply for fellowships through the Loyola Undergraduate Research Opportunities Program (LUROP). Starting in the Summer of 2019, more than 60 Loyola Biology, Bioinformatics, and Neuroscience undergraduates were provided with fellowships to support their work within the department. Students who are awarded support presented their findings at the Weekend of Excellence in the Spring 2019, these students, overwhelmingly from the Biology Department, communicated their findings to their peers. In Spring 2020, while the campus was closed, students still had the opportunity to present their work at a virtual symposium.

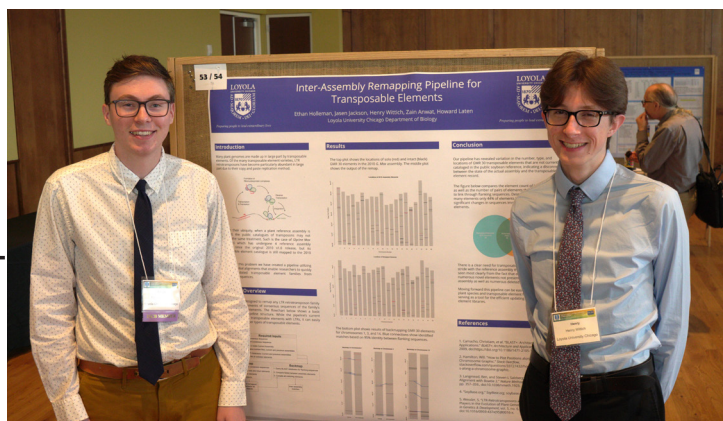
Frontiers in Science Symposium 2019 - Keynote Speaker Professor Lee Alan Dugatkin

Each Spring the Biology Department hosts the annual Frontiers in Science Symposium. 2019's invited speaker was Dr. Lee Dugatkin. Dr. Dugatkin is an evolutionary biologist and historian of science. He is currently a professor at the University of Louisville. His most recent work is a book, co-written with Lyudmila Trut, that tells the story of how the Soviet biologists Dmitri Belyaev and the aforementioned co-author, Dr. Trut, were able to design and execute a research project that was an investigation into canine domestication. In this case, they used silver foxes rather than wolves. They were able to successfully tame foxes in a surprising and rapid fashion. The talk was very well-received by students and faculty alike, and we hope to continue next year the tradition of bringing insightful speakers to share their thought-provoking views with the Loyola community.

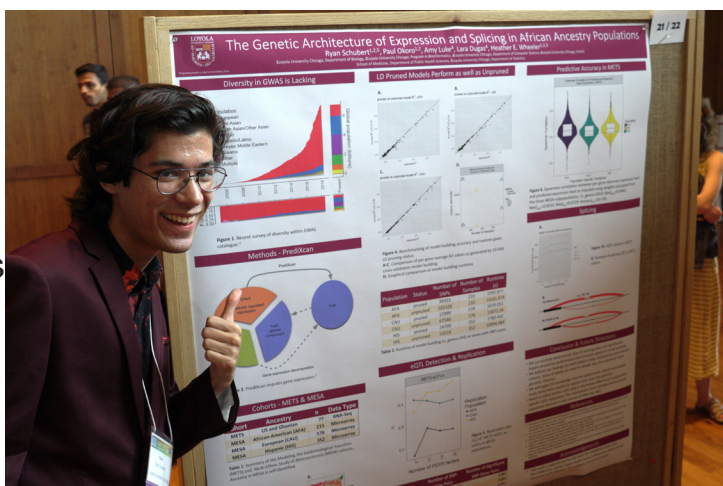


Loyola sends 9 students and 3 faculty to present research at the Great Lakes Bioinformatics Conference in Madison

In June 2019 Loyola students presented posters and gave talks on their research at the Great Lakes Bioinformatics Conference in Madison, Wisconsin. Loyola professors Heather Wheeler, Catherine Putonti, and Michael Burns presented their research. Additionally, Paul Okoro, Ryan Schubert, Jennifer Takamura, Angela Andaleon, and Elyse Geoffroy attended and presented research from the Wheeler lab. Vraj Patel and Dawid Maciorowski represented the Burns lab, while Henry Wittich and Ethan Holleman attended and presented their research from Howard Laten's lab.



Ethan Holleman and Henry Wittich (Laten Lab)



Ryan Schubert (Wheeler Lab)



Michael Burns, Angela Andaleon, Jennifer Takamura, Heather Wheeler, Ethan Holleman, Vraj Patel, Dawid Maciorowski, Henry Wittich, Ryan Schubert, and Paul Okoro (from left-to-right, and front-to-back)



Vraj Patel (Burns Lab)

Wheeler Lab Students Selected to Present at the 2019 American Society of Human Genetics (ASHG) annual meeting in Houston, TX

Two members of the Wheeler Lab were selected to give platform presentations at the 2019 American Society of Human Genetics (ASHG) annual meeting in Houston, TX, in October. Peter Fiorica, senior Biochemistry and Biology (Molecular) major and Carbon Fellow, gave a platform presentation titled “Transcriptome-wide association study in African Americans identifies associations with prostate cancer.” Bioinformatics MS student Paul Okoro gave a platform presentation titled “Optimizing gene expression predictive performance across global populations.” ASHG is attended by over 8,000 scientists from around the world and under 10% of abstracts are selected for platform presentations; this is a tremendous accomplishment for these two Loyola students.



Paul Okoro



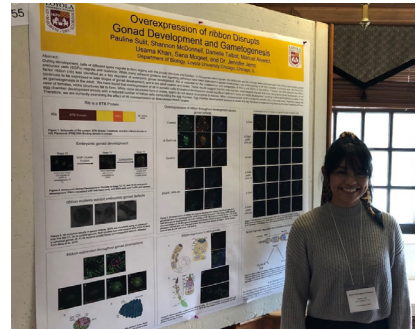
Peter Fiorica

Mierisch Lab students present research at the Midwest Drosophila Conference in Allerton, IL

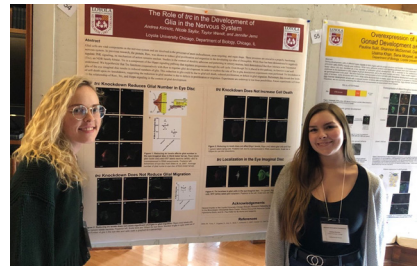
Undergraduates Claire Chaikin, Andrea Kirincic, Shannon McDonnell, Nicole Saylor, Karolina Senkow, and Pauline Sulit of Jennifer Mierisch's lab presented their work at the Midwest Drosophila Conference in Allerton, IL in November. Students discussed their research on genome structure and the genetic regulation of reproductive system development and glial development in the nervous system with scientists from around the Midwest. Support from the Biology Department and the Loyola Undergraduate Research Opportunities Program made this research and conference attendance possible.



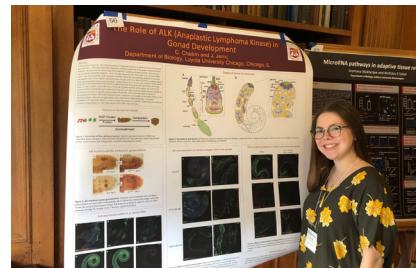
(From left to right) Andrea Kirincic, Pauline Sulit, Nicole Saylor, Claire Chaikin, and Karolina Senkow



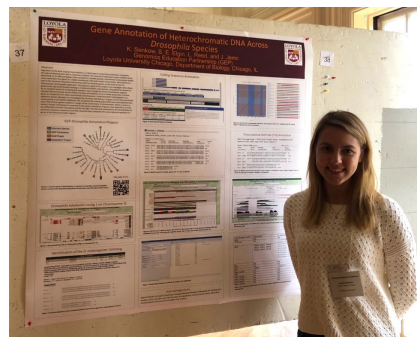
Pauline Sulit



Nicole Saylor (left) Andrea Kirincic (right)



Claire Chaikin



Karolina Senkow

Master of Arts in Medical Sciences (MAMS) Program Update

The Class of 2019 has graduated! We wish them success with their medical school applications! Despite the frigid winter the class held a fun-filled Trivia-Night fundraiser in Lincoln Park for Old Irving Park Community Clinic, one of MAMS' clinical collaborators. MAMS also welcomed a new faculty member, Dr. Diana Kim who brings her expertise in neurobiology to our students. Neurobiology is a typical part of the M1 curriculum and this addition to our program makes MAMS graduates more ready than ever for their first year of medical school. Also notable this year was the establishment of a new collaboration between the MAMS program and Vios Fertility Institute, established by Angeline Beltsos, MD. For the past two years, Vios has hired MAMS alumni during their gap year and has been so impressed with them they asked to formalize the relationship with us. Vios will now begin accepting volunteers from the next MAMS class, adding reproductive technology to the experiences that MAMS students can have while in the program. Meanwhile, admissions to medical schools for the class of 2018 continue to roll in! The impressive list includes Univ. of Wisconsin Madison, Tulane, SUNY, UC-Irvine, Loyola Stritch and at least 35 other medical schools.



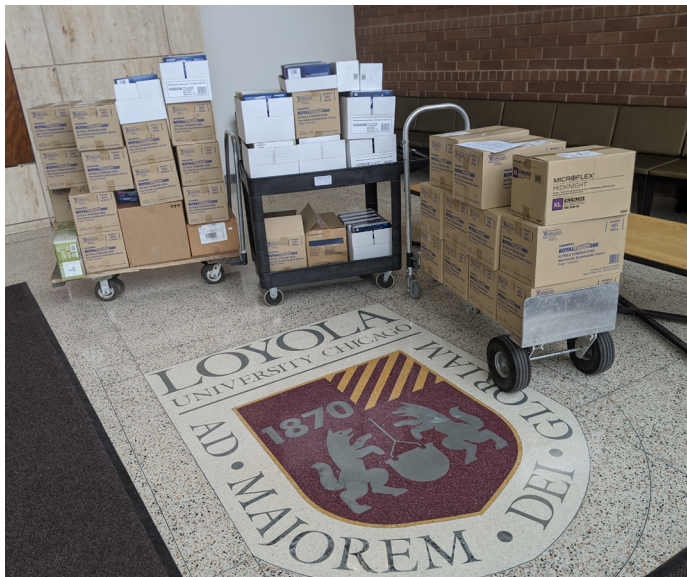
A mentoring lunch between MAMS students, MAMS alumni and Vios Fertility Institute Staff. Pictured left to right: Danielle Burkley, Hanna Mandell, Paige Green (Vios), Jacqueline Sehring ('18), Hannah Johnson (Vios), Deborrah Blackburn, Abisola Oso, Eun-sol Lee. Back: Anisa Hussain ('18), Emma Radley.

Loyola Departments and Research Labs Donate Supplies to Local Hospital

The Biology department maintains a stockroom with gloves, masks, and other personal protective equipment (PPE) that are, under normal circumstances, used in our teaching and research labs. With our labs being taught remotely and much of our research shuttered, Beata Czesny (stockroom manager) and Virginia Lorenzo (business manager) approached the Chair of the Biology Department, Jim Cheverud, about donating our PPE reserves to the hospital at Maywood, as they had put out a request for donations from the public. In addition to what we had in the stockroom, faculty from across the department donated their unopened boxes of gloves and N95 masks that were in their research labs. Several labs depleted their entire stock of PPE. In total, Biology donated three cases of N95 masks and about 25 cases of gloves.

As word got out that we were organizing this donation, several other departments pitched in. Chemistry donated 11 cases of gloves, IES donated another case, and Student Health Services brought over about two more cases of N95 masks and disposable gowns. Once everything was added together the total donation filled the back of Kana Henning's SUV and department F150 pickup truck. Some of the donated supplies went to support LUC PD, which was also in need of PPE to protect the officers serving the LUC community.

Thom Sanger and Kana drove the donation to Maywood. The hospital administrators were shocked by the size of the donation. From Kana, "At LUMC, they directed me to place the donations under a folding table in their command center... it is clear that they are not receiving donations of this scale, so your generosity made a tremendous impact."





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ABOUT THIS NEWSLETTER

This newsletter was compiled by Dr. Michael Burns and edited by Drs. Jim Cheverud, Jen Beshel, Caroline Turner, and Jennifer Zitzner for the purpose of keeping our departmental alumni abreast of new developments, programs, and events.

We would love to hear from you!

If you know someone whom you would like to see featured in the Faculty or Alumni Spotlight section, or have ideas about things you would like to see in future newsletters, please send a message to biologydept@luc.edu.

Also, we here in the Biology Department love hearing from our alums, so don't be a stranger! Please feel free to email us with updates to let us know where you are and what you're doing; email pictures if you have them!

Alumni Support

The University and the Department of Biology are extremely grateful for the generosity of all our donors. Donations in any amount, from one to thousands of dollars, are appreciated and help the department serve our students. Your support of the Biology Department permits us to continue many programs and services including:

- Student research fellowships
- Travel funds that allow students to attend local and national meetings
- Professional development opportunities for Biology Faculty
- Equipment for teaching and research laboratories

If you would like to make a gift to the Biology Department Gift Fund, you may do so in two ways:

Online: [Click here](#) to be redirected to the secure donations website

Mail: Please mail checks to
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c/o Stephanie Tomakowski
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Please include in the memo line: Biology Department Gift Fund