

# Department of Biology Updates

#### A Message from the Chair

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).

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. Students are again participating in a very successful collaborative research program between the Oncology Program at Stritch School of Medicine and the College of Arts and Sciences. We continue seeking broader and deeper connections with the Health Sciences Campus' Nursing and Medical Schools.

We are especially proud of our 65 undergraduates who presented their work at Loyola's Weekend of Excellence on the Lake Shore Campus at the end of the Spring Semester. Among our faculty, Dr. Heather Wheeler received the Sujack Family Award for Faculty Research Excellence while Dr. Stefan Kanzok was recognized as a Master Teacher. This is the third consecutive year in which department faculty have been honored with a Faculty Research Award.

We have two faculty members who have left the university this year. I regret to inform you that Dr. Robert Morgan, who taught Human Structure & Function and Ornithology, passed away last December. He was a great teacher who will be sorely missed. Dr. Jeff Doering is retiring after long university service, including a 12-year term as Biology Department Chair. He was critical to the growth of the department over the years and in managing the construction and occupation of the new Quinlan Life Sciences Building. Dr. Doering will be appointed as a Professor Emeritus in Biology and will continue teaching a section of Genetics as needed. His service to Biology and its students is much appreciated and in recognition, we have designated one of our Biology Summer Research Fellowships as the Dr. Jeff Doering Summer Research Fellowship. Donations can be made at the Biology Department web site (<a href="https://www.luc.edu/biology">www.luc.edu/biology</a>).

Best wishes,

Jim Cheverud, Professor and Chair

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#### Loyola Women in STEM

Recent data from the Integrated Postsecondary Education Data System (IPEDS), analyzed by *The Wall Street Journal* and Emsi\* placed Loyola University Chicago in the top ten institutions for providing women degress in STEM. Two of the Biology department's faculty, Drs. <u>Catherine Putonti</u> and <u>Terry Grande</u>, have been profiled as role models within their fields of biological research at Loyola and shared their experiences, insights, and predictions. The common themes were that the there is an increasing gender diversity in STEM and that providing role models and support for undergraduates are effective ways to overcome gender imbalances.

\*Korn, M. (2017, Sep 26). U.S. news: Colleges move to close gender gap in science. Wall Street Journal. 

†Photos by Lukas Keapproth

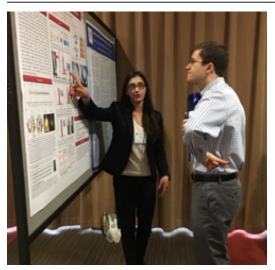


Catherine Putonti, right, and a student in her research program, Andrea Garretto<sup>‡</sup>.



Terry Grande, left, and a student in her comparative anatomy course, Sarah Wohler<sup>‡</sup>.

#### Loyola Undergraduate Wins Top Poster Presentation Award at Chicago Area Undergraduate Research Symposium (CAURS)



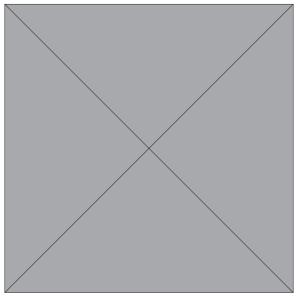
Each year, undergraduate students from the Chicagoland area gather to share their research in a diversity of areas through poster presentations, oral presentations, and roundtable discussions at the Chicago Area Undergraduate Research Symposium (CAURS). This year, CAURS took place at DePaul University on Sunday, April 15, 2018. Sara Khan (left), a senior undergraduate student in the Kanzok lab won "Top Poster Presentation" for her work entitled "Structure and function of the highly conserved Phosducin-like protein 3 (PhLP-3) of the malaria parasite Plasmodium." Pictured here is Sara presenting her poster to one of the many attendees.

### Frontiers in Science Symposium 2018 - Keynote Speaker Dr. John Dye

Each spring, the Biology Department hosts the annual Frontiers in Science Symposium. This year's invited speaker was Dr. John Dye. As the Chief of Viral Immunology within the Virology Division at USAMRIID (U.S. Army Medical Research Institute of Infectious Diseases), Dr. Dye oversees the execution of research programs in medical countermeasures against viral biological warfare agents in a high-hazard, multi-suite, biocontainment laboratory that operates at Biosafety Levels 2, 3, and 4. Dr. Dye's research focuses on filovirus vaccines and therapeutics, with the ultimate aim to counteract the Ebola virus and other high risk pathogens.



Dr. Dye is on the cutting edge of research and development of medical countermeasures against filoviruses (e.g., Ebola virus, Sudan virus, and Marburg virus) and other biological threat agents. Since 2012, Dr. Dye has been traveling to Uganda to track the immune response in over 200 survivors of Ebola virus disease. Specifically, he assesses the immune responses of these survivors over time in hopes of determin-



ing an "immune profile" to drive vaccine and therapeutic development for the future. His extensive network of research collaborators has influenced basic science research on various aspects of virology and immunology, including the identification and publication of filovirus and Lassa virus receptors in the journals Nature and Science, respectively. These findings have driven protein-specific medical countermeasures against both viruses in order to provide a treatment option.

Dr. Dye's 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.

### Biology Faculty Receive Sujack Awards for Excellence in Teaching and Research

Each year, Loyola University Chicago and the Sujack Family present awards to faculty who have demonstrated excellence in teaching as well as faculty who have excelled in research and scholarship outside of the classroom. This year, Dr. Heather Wheeler (left), Assistant Professor in Biology and Computer Science, received the 2018 Sujack Family Award for Faculty Research Excellence and Dr. Stefan Kanzok (right), Associate Professor in Biology received the 2018 Sujack Master Teacher Award. Congratulations to Drs. Wheeler and Kanzok on their achievements in and out of the classroom!



### Roberta (Bobbi) Lammers-Campbell Retires after 28 years of Service to Loyola University Chicago

After 28 years of service in the Biology department, Institute of Environmental Studies program and Loyola University Ecology and Retreat Campus (LUREC), Bobbi Lammers-Campbell is retiring leaving a legacy filled with changes that have occurred over the years and hopes for the future of LUREC. In her own words, Bobbi describes her time at Loyola.

What brought you to Loyola and how have things changed over the years you have been here?

I had taught three years in the Chicago Public Schools after leaving an associate professorship at Augsburg College in Minneapolis. I wanted to get back to college teaching. At that time, non-tenure track (NTT) faculty taught at the whim of the department chair, who alone

hired us. I was hired to teach genetics lab and cell biology lab, two classes I had never taught before. NTTs were not allowed to teach "content" course (i.e., lectures) during the day then – unless of course the administration needed us for something.

Also, we had no job descriptions and got our letters of appointment sometime after the spring semester ended. Things eventually changed because the NTTs got together in Biology and with some of the English NTTs and wrote a job description, asking for a number of changes. I am very proud of the work we started. Eventually I transitioned from genetics and cell labs to several plant courses and general biology lab. I coordinated the general labs for several years and, with colleagues, produced a lab manual that had a strong emphasis on organismal biology and evolution.

What have you been most proud of during your time at Loyola?

I started to teach the Botany class (at night) and became interested in the specimens scattered all over two floors of the old Damen Hall. Eventually they were put together into a formalized collection, and when the new building was built,

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#### Roberta (Bobbi) Lammers-Campbell Retires after 28 years of Service to Loyola University Chicago

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a formal herbarium collection space was created. I was very proud of that lab when we moved into the new building. Eventually I established a formal herbarium at the LUREC campus as well.

What are some of your favorite memories of Loyola, the students, and your colleagues?

My fondest memories of students are the ones who would come back long after classes were over and thank me for being so hard on them and insisting they learn how to study. It also makes me very pleased when students return to say that I have influenced what they have decided to do with their lives – especially those that have gone on to get advanced degrees in Botany.

During your time here, you have held several roles. What has been your favorite or most memorable role?

My favorite job has been my position at LUREC where I am the director of the academic program and the ecological restoration. When I first taught restoration ecology in the Biology department, there were no texts on the subject. I had done some research at Glacial Park in McHenry County, and when Loyola purchased LUREC that was not far from Glacial Park, I was delighted. My job became more and more involved with LUREC, and about 2014 I transferred full time to IES and a partly administrative job at LUREC. I love teaching at LUREC. I have taught Winter Ecology there on site for several years. This summer, as my last class, I will be teaching Summer Flora at LUREC.

What are some of your hopes for the future of LUREC?

My hopes for the future of LUREC is that it will become an integral part of the education of ecology students in Biology as well as the restoration/conservation students in IES. It is an underused resource for Loyola, and many people don't know it exists. Even fewer have ever been out to see the 20-acre fen that we are restoring. I also hope that we will be able to make the fen part of the Illinois Nature Preserves system. I plan to continue my work with the LUREC restoration and with the herbaria on both campuses in my role as an emeritus faculty.

#### Professor Jeffrey Doering Retires After 35 Years of Service to the LUC Biology Department

After 35 years of service as a faculty member in the Biology department, including 12 years as department chair, Jeffrey Doering is retiring. Professor Doering describes his time at Loyola.

What brought you to Loyola?

I was looking for a faculty position at a university where both teaching and research were highly valued. My brother was a Loyola biology alum and he spoke very highly of the department and the university, and it sounded like the kind of institution I'd like. As it turned out our Biology department had an opening for a developmental biologist (my area of formal training) at the time and so I applied and was offered the position. Thirty-five years later I have never regretted that I accepted the offer.

During your time here, you have held several roles – teacher, researcher, mentor, departmental chair. What has been your most memorable role?

I have absolutely enjoyed every one of those roles. Probably the most memorable and challenging

was my 12 year term as department chairperson. This was a time of a very great increase in the number of Biology students, development of new department programs, and the design and construction of the Life Sciences Building. I was always impressed by the enthusiasm and dedication the faculty had in working together to achieve the goals we had at that time and overcoming the challenges we faced. I was also grateful that as chairperson I had the opportunity to interact with a number of other units of the university, including those outside the sciences. That always enhanced my academic interests.

What are some of your favorite memories of Loyola, the students, and your colleagues?

I have always been impressed by how friendly and hard-working our students are. They want to get to know faculty personally and I always remember students in my classes who came right up and introduced themselves and welcomed me to Loyola my continued on page 8



#### Jeffrey Doering Retires After 35 Years of Service to the LUC Biology Department

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first week on campus. The students also give great effort to their studies while often working many hours in jobs off campus. That's a real testimony to their dedication to education. My faculty colleagues have always been intent on cultivating a family-like feeling in the department, being eager to help each other professionally and personally, and warmly welcoming new members. My experience is that you don't have that environment at all institutions, and it's been great to experience.

What are some of the things that have changed over your time at Loyola?

The physical surroundings both around campus and in the department have changed enormously. When I began at Loyola, the location of LSB was an apartment building, Crown and Flanner were the "new" buildings on campus, and the Biology department occupied 2 cramped floors of the old Damen building (current site of Cuneo). The student body was barely half its current size. Now I'm going to sound really old, but we had no copier machine (still used mimeograph), no computers, and chalk and the blackboard was the only means to present a lecture. My time at Loyola has been a time of enormous change and it's been really exciting to witness.

What are some of your hopes for the future of the Biology Department?

I hope the department will develop some more new programs, particularly BS/MS dual degrees. I also hope we find ways to provide research experiences for more student (maybe with more faculty and research space?!). I know the department will continue to provide outstanding student-focused educational experiences while also conducting first-rate research.

### Loyola Biology Faculty, Dr. Andrea Gschwend, takes new tenure-track position at Ohio State

Andrea Gschwend spent the previous year at Loyola teaching a full load of courses including General Biology and Genetics. She was a well-liked and proficient lecturer and scientist. She will be leaving Loyola and the Biology to Department as she has accepted a tenure-track position in the Department of Horticulture and Crop Sciences at The Ohio State University in Columbus. Her research lab there will be taking a phylogenetic approach to identifying newly evolved genes that underlie agriculturally significant traits in *Vitis* (grapevines). We are grateful for her service at Loyola and wish her all the best!

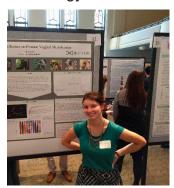


#### Master of Arts in Medical Sciences (MAMS) Program Update

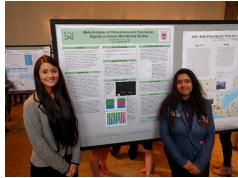
The MAMS Class of 2018 has just graduated amid many smiles and hugs! We wish them success with their medical school applications! During the year they not only succeeded in their coursework, they raised \$1000 for the Old Iriving Park Community Clinic, a free clinic in Chicago. Also notable was the establishment of a new collaboration between the MAMS program and the Rohingya Cultural Center (RCC) on Devon Avenue. The RCC is a new community service organization that is addressing the needs of the Rohingva immigrants currently granted refugee status in the US. This collaboration was spearheaded by MAMS student Sagar Chaudhari (BA Loyola 2017, MA Loyola 2018). Sagar organized a group of MAMS students to take shifts at RCC to step into a large need the Center had for services to the traumatized refugees. Creative ways were found to negotiate language barriers and identify those in need of medical attention for chronic, untreated illnesses such as diabetes and hypertension. Currently, the psychologist who works at RCC is writing a grant based in part on Sagar's and the MAMS student's interventions. Meanwhile, admissions to medical schools for the class of 2017 have also steadily filtered in throughout the spring. The impressive list of schools includes Dartmouth, Uniformed Services Medical School (for our aspiring space physician W. Williams), Stritch School of Medicine and more.

### Students Present their Work at the Undergraduate Research Symposium

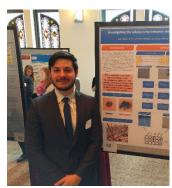
The Weekend of Excellence took place this year over the weekend of April 21st and the Biology Department was quite well represented. There were approximately 300 presentations during the Undergraduate Research Sympsoium by students from across the University, with Biology students comprising a third of that total.



Biology Senior, Rita Smith, presenting work on the primate microbiome.



Biology Junior, Abigail Erickson (left), and Sophomore, Sidra Sohail (right) presenting a comparison between gastric and colorectal cancers.



Biology Senior, Vane Ristov, presenting his project on the bacteria associated with melanomas.



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## 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 is with updates to let us know where you are and what you're doing; email pictures if you have them!

#### **Alumi 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
Loyola University Chicago
Biology Department
c/o Stephanie Tomakowski
820 N. Michigan Avenue, Ste. 1721
Chicago, Illinois 60611

Please include in the memo line: Biology Department Gift Fund

#### ABOUT THIS NEWSLETTER

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