UPBM E-Newsletter

Undergraduate Program in Biology and Medicine



Happy Fall UPBM!

Everyone has been hard at work making this semester a successful one. We'd like to highlight some of the amazing things that have been going on the past month.

Remember, we want to hear from you! Learned something interesting recently? Been recognized for your achievements? Let us know by emailing marcella.sherlock@rochester.edu and you could be featured in future newsletters!

Quick Links

- UPBM Website
- UPBM E-News Archive
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Student Spotlight: Rosie Flanagan

Rosie Flanagan is a Take 5 Scholar majoring in Molecular Genetics and English and American Literature. This past summer she went across the world on the trip of a lifetime to



work with orangutans and other animals. Here's what she had to say about her eyeopening experience:

"In June of this past summer, I had the eyeopening opportunity to volunteer with orangutans, one of our endangered cousins, in Borneo, Malaysia. I had loved orangutans for a while, and decided to take a trip across the world to help them. During this time, I worked at a rehabilitation facility for animals such as orangutans, sun bears, macaques, and crocodiles. As I lived in the Bornean rainforest, I was exposed to an environment I was very unfamiliar with. This proved challenging at first, as the constant insects (including the painful Tarantula Hawk wasp), the noisy gibbons, and nibbling rats were startling and left me constantly on-quard. Over time, I got used to everything and loved the still yet alive rainforest



nights, with their bioluminescent fungi and vibrant carnivorous plants and animals.

During the day, I cleaned animal cages and provided them with food, as well as made enrichment materials to keep their minds sharp. Most of

these animals had been in abusive situations, and the rehabilitation center sought to care for them and teach them until they were able to be released into the wild. While there, I learned about the harsh neglect and abuse that occur to orangutans and sun bears every day. I learned to keep my distance; we should want to see these animals in the wild, not cuddle with them -

that's the entire point. We can want to protect something even though we may not be able to hold it. I developed a greater appreciation for these animals as well as the



people who work every day (with very little money) to protect them.

These animals' home is declining every second, and as orangutans are solitary creatures, they need much space to exist. There is so little rainforest left, and in Borneo and parts of Asia, it is largely due to the palm oil industry. I learned about the ways in which I can stop palm oil use in my own life, and encourage others to do the same. We have so much diversity of life on this planet, and we are connected to all of it. Please, let's do something while we still can."



October 2019

UPBM Alumni Headed to the Hall of Fame

One of our very own is headed to the Hall of Fame, the Athletic Hall of Fame that is. Diane Jean Ulatowski Tibbetts '89 was inducted to the Rochester Athletic Hall of Fame on October 4th, 2019 during Meliora Weekend, along with 7 other alumni.

Diane is from Uncasville, Connecticut. She played volleyball and was a starter all 4 years that she was here. She helped guide the team to a UAA volleyball team championship in 1988. She was voted MVP and was also named to the First Team All-UAA. Besides these accomplishments, she was also named to the UAA's Silver and 30th Anniversary teams, as well as the All-Northeast Region team.

Off the court, Diane graduated with a B.S. in Microbiology. She earned her M.S. at the University of Connecticut. She started her career at Pfizer, Inc. in Animal Healthy Discovery but then moved over to more volunteer work. She's helped with disaster relief, raised service dogs for Fidelco, and even gone on mission trips around the globe.

Congratulation's Diane!

Head to the University of Rochester Athletics page to read more about the Athletic Hall of Fame inductees.

The Science of Scrub-Jays

Dr. Nancy Chen is an evolutionary biologist and an assistant professor of Biology here at the University. Every year she heads down to Venus, Florida to study and observe the Florida Scrub-Jay.

The Florida Scrub-Jay is the only species of bird native to Florida. They measure around 12 inches long and have a blue head and wings. The birds are non-migratory and are one of only 15 bird-species native to the United States.

Dr. Chen uses data that has been collected over 50 years to create family trees for the birds and develop pedigree simulations. This is a way to analyze how the birds' genetic material has changed over the years due to loss of habitat. She just received a National Institute of Health Maximizing Investigators' Research (MIRA) Grant to help with her research and to develop a better understanding of how this has implications on human genetics.



(University of Rochester photo / J. Adam Fenster)

Keep up the great work Dr. Chen!

Click here to read more about Dr. Chen's work with Florida Scrub-Jays.

Department of Biology Scavenger Hunt and Research Showcase

The Department of Biology made Meliora Weekend more interactive than ever this year. On Friday October 4th,

the department set up shop in the Goergen Atrium and sent guests on a trip to learn about all things science.



Attendees first stop was the Welcome table to get their map. If they were able to get 6 stickers, they would win a prize. To obtain stickers, you needed to

engage with 2 poster presenters, learn 3 things in the demo room, and learn 1 thing in the Ward room.



The research showcase (also known as the UPBM Poster Session) had a record number of participants this year, with 27 students presenting their findings. Students were able to engage and talk



science with their professor's, friends, and family. The list is as follows:

Nicholas Abraham '21, BNS Advait Athreya '20, BMG/APM Kamel Awayda '20, BBC Daniel Barnett '20, BNS Victoria Nadezhda Bela '21, BMB Sammy Cheng '21, BMB Hannah Cook '21. BEB Brandon Dexter '20, BMG Taylor Dontino '20, BCD Yidan Gao '20, BMB/PSY Gilbert Giri '21, BCB Qingyuan (Anna) Jia '21, BMG Madina Jumabaeva '20, BMB Deniz Kesmen '20, BNS Emily Laskey '21, BBC/PSY Yifei (Sylvia) Lin '20, BIO Zhengfeng Liu '20, BMG Shaopeiwen Luo '20, BBC/BSB Colleen Maillie '20, BCB Evelyn Matei '21, BNS/BMB Sherif Negm '22, BBC Melissa Proven '20, BMB Yong Soo (Simon) Ra '20, BNS/CSC Alexandre Trapp '20, BCB Austin Varela '20, BCB/DSC Amanda Waugh '20, BMB/EMC Brianna Zavala '20, BMB

Click here to watch the UPBM Poster Session 2019 Slideshow



Garnish Scholar-Athlete Awards

Ten senior athletes were recognized on September 7th for their achievements in both athletics and academics. The Garnish Scholar Award is in memory of Lysle "Spike" Garnish, a former coach and athletic trainer for the University.

4 of these students are our very own UPBM majors:



Michaela Burrell – Ecology and Evolutionary Biology

Colleen Maillie – Computational Biology

Garrett Renslow – Neuroscience and Psychology

Jamison Seabury – Microbiology

To read more about the Garnish Scholar-Athlete Recipients visit the University of Rochester athletics page.

From RNA to APA



Knowing how to write effectively is invaluable to scientists. Katherine Schaefer, associate professor in the Writing, Speaking, and Argument Program and recipient of the 2019 Goergen Award for Excellence in Undergraduate Teaching, can attest to that.

Before moving over to the Writing, Speaking, and Argument Program in 2009 Schaefer started her career as an RNA biochemist. She then moved over to being an immunologist and then became an assistant professor in the Department of Gastroenterology and Hepatology.

"Scientists have to convey how they came up with their questions and really convey what they did in a convincing way that's going to make the reader go, 'Yeah, they did their research right. They did all the controls. That's the theme of all of my teaching and all of my research these days."

To learn more about Katherine, please visit Katherine Schaefer: A scientist who found the 'write' stuff.

To read more about The 2019 recipients of the Goergen Award for Excellence in Undergraduate Teaching, visit the University's Newscenter webpage.

The Office of Undergraduate Research

Interested in doing research on campus but don't know where to start? The Office of Undergraduate Research is here to help.

Find research opportunities that suit your needs by attending walk-in hours, making an appointment, or going through the Undergraduate Placement Program (UR-UPP).

The office can also help you identify different funding opportunities, both internal and external to the University. Examples include the de Kiewiet Summer Research Fellowship, the Research Initiative Award for Undergraduates, and the McNair Research Program.

To schedule an appointment, email undergradresearch@ur.rochester.edu. Walk-in hours are also available and vary by day.

To learn more, visit the Office of Undergraduate Research Getting Started Guide.



Pictured here: Teresa Long, Ann Robinson, and Arokoruba Cheetham-West

Course Registration Schedule

Registration for the Spring 2020 semester is fast approaching. Here are important dates to remember:

Class of 2020

8 a.m. November 4th – 7 a.m. November 5th

Class of 2021

8 a.m. November 5th – 7 a.m. Wednesday November 6th

Class of 2022

Wednesday November 6th

- ❖ DOB 10/1-12/31: 8 a.m. 9:45 a.m.
- ❖ DOB 1/1-3/31: 10 a.m. 11:45 a.m.
- ❖ DOB 4/1-6/30: Noon 1:45 p.m.
- ❖ DOB 7/1-9/30: 2 p.m. 3:45 p.m.

ALL members can register between 4 p.m. November 6th and 8 a.m. November 7th

Class of 2023

Thursday November 7th

- ❖ DOB 4/1-6/30: 9:45 a.m. 11:30 a.m.
- ❖ DOB 7/1-9/30: 11:45 a.m. − 1:30 p.m.
- ❖ DOB 10/1-12/31: 1:45 p.m. 3:30 p.m.
- ❖ DOB 1/1-3/21: 3:45 p.m. 5:30 p.m. ALL members can register after 5:45 p.m. and it will remain open.

Registration opens back up for the class of 2020, 2021, and 2022 at noon on Friday November 8th. Registration will remain open

Important Deadlines

The spring semester is coming quicker than you think. Here are some important deadlines to consider:

Independent Research 395 Courses

The Spring 2020 course deadlines are as follows:

4 Credit 395 Course

- Must start course by Friday 1/24
- Submit online UPBM Pre-Registration form by Friday 1/31
- Submit online CCAS Independent Study form by Friday 2/8

3 Credit 395 Course

- Must start course by Friday 2/7
- Submit online UPBM Pre-Registration form by Friday 2/14
- Submit online CCAS Independent Study form by Friday 2/21

2 Credit 395 Course

- Must start course by Friday 3/6
- Submit online UPBM Pre-Registration form by Friday 3/13
- Submit online CCAS Independent Study form by Friday 3/20

Honors in Research

- Students must submit an Application for Candidacy by Monday 3/2.
- *Only open to seniors or T-5 students in their fifth year

de Kiewiet Summer Research Fellowship

The Summer 2020 deadlines are as follows:

- Submit Intent to Apply by Monday 3/2
- Submit the following documents to BioDeptUgOffice@ur.rochester.edu by Monday 3/16
 - Formal Scientific Research Proposal (6 pages)
 - Relevant Professional Experience Summary (1 page)
 - Research and Career Goals Summary (1 page)
- Have research mentor and an additional faculty member email a letter of support to BioDeptUgOffice@ur.rochester.edu by Monday 3/16
- Have research mentor email Statement of Authorship to BioDeptUgOffice@ur.rochester.edu by Monday 3/16

Class of 2020 Senior Slideshow

Attention seniors! Submit your photos for the Class of 2020 Senior Slideshow, which will be shown during the Biology Department Diploma Ceremony. Take a trip down memory lane and reminisce on all the great times you had here in Rochester.

Please email all submissions to marcella.sherlock@rochester.edu in the UPBM office.

View the Class of 2019 Senior Slideshow.

Undergraduate Opportunities

Alaskan Observers North Pacific Ground Fish Observer

North Pacific Ground Fish Observer Position Openings

Albert Einstein College of Medicine Summer Undergraduate Research Program

Amgen Scholars
Amgen-UROP Scholars Program

Amgen Scholars Program Homepage

Case Western Reserve University Summer Programs

Cincinnati Children's Hospital Summer Undergraduate Research Fellowship (SURF)

City Internships Program Overview

Cleveland Clinic Center for Reproductive Medicine Summer Internship Program

Cold Spring Harbor Watson School of Biological Sciences

Summer Undergraduate Research Program

Columbia University / Barnard College Amgen Scholars Summer Research Program

Cornell University

Boyce Thompson Institute for Plant Research Internships

Council on Undergraduate Research National Conference on Undergraduate Research (NCUR)

Davis Projects for Peace Kathryn W. Davis Projects For Peace

Deutscher Akademischer Austausch Dienst (DAAD)

Paid Research Internships in Germany

Duke University / Robert Noyce Teacher Fellowship Program **EPA Internships**

Medical Research and Health Science Internships Available in Europe!

Fulbright Scholarship US Student Program

Gerstner Sloan-Kettering Summer Undergraduate Research Program

GFHI

Ghana Health and Education Initiative

Goldwater (Barry)

Scholarship & Excellent in Education Program

Harvard School of Public Health Summer Program in Biological Sciences Public Health

Hutchinson (Fred) Cancer Research Center Summer Undergraduate Research Program

Hutchinson (Fred) Cancer Research Center Internships in Scientific Research or Medicine

Homeland Security DHS Education Programs HS-STEM Summer Internship Program

Institute for Health Metrics and Evaluation (IHME)

Post-Bachelor Fellowship

Journal of Young Investigators Author Guidelines Requirements

Louisiana University Marine Consortium Summer Field Course Information

MATCH Education Teacher Residency

Mayo Clinic

Summer Undergraduate Research Fellowship

MedLife Volunteers

Michigan State Veterinary Enrichment Summer Program

National Collegiate Research Conference (NCRC)
NCRC 2018 Applications

Nemours/Alfred I. duPont Hospital for Children and Nemours Office of Health Equity and Inclusion

Summer Undergrad Research Scholarship

One Heart Source Volunteer Opportunities in Africa

PIRG - Job Openings for Graduating Seniors Jobs

Roswell Park Cancer Institute Summer Research Programs

Southern Teaching Agency Spring Job Fairs

SUNY Oswego Global Laboratory Summer Science Research Abroad

Teach for America Opportunities

Texas Tech University Health Sciences Center Summer Accelerated Biomedical Research Internships

The UNCF Merck Science Initiative Science Scholarships and Fellowships

University of Iowa Summer Undergraduate MSTP Research Program

University of Michigan Summer at Michigan for Undergraduate Research Training

University of Missouri Summer Research Programs Cell and Molecular Biology Summer Research Positions

University of Notre Dame Environmental Research Center Research

University of Rochester Undergraduate Research Exposition (URE)

University of Rochester, RC Libraries Research Initiative Award for Undergraduates

University of Rochester, UPBM deKiewiet Summer Fellowship

University of Texas South Western

Summer Undergraduate Research Fellowship SURF

University of Rochester, RC Libraries
Research Initiative Award for Undergraduates

University of Rochester, UPBM deKiewiet Summer Fellowship

University of Texas South Western Amgen Scholars Program Summer Undergraduate Research Fellowship SURF

University of Utah Undergraduate Research Programs

University of Virginia / Mountain Lake Biological Station
Summer Research Experiences of Undergraduates

Upstate Medical University
Research Programs in Biomedical Sciences
Fellowship Program

West Virginia University Center for Neuroscience Summer Undergraduate Internship SURI Program

The Woodrow Wilson National Fellowship Foundation
Teaching Fellowships

World Teach Programs

Graduate Studies

Albert Einstein College of Medicine Biomedical Sciences

Arizona State University Science and Technology Policy

UC Berkley Metabolic Biology Molecular Toxicology

Cedars-Sinai Medical Center
Ph.D. in Biomedical and Transitional Sciences

Cornell University Ecology & Evolutionary Biology

Duke University Neurobiology I Program in Genetics & Genomics

George Washington University
Environmental Resource Policy Program

Harvard Medical School
Master of Medical Science in Immunology

Harvard-School of Public Health Ph.D. Program in Biological Sciences in Public Health

Icahn School of Medicine at Mount Sinai Graduate School of Biomedical Sciences

Indiana University Biochemistry Graduate Program

Louisiana State University Biological Sciences Pharmacology & Experimental Therapeutics

Michigan State University
College of Veterinary Medicine Graduate
Programs

Penn State College of Medicine Ph.D. Programs I MS Programs

Salisbury University
Master of Science in Applied Biology

Seton Hall University

MS Biology I MS Microbiology I Ph.D. Molecular Bioscience

St. Jude Graduate School Biomedical Sciences

Stony Book University
Neuroscience Masters and Ph.D. Program

Texas Tech University
School of Biomedical Sciences

University at Buffalo Ph.D. Biomedical Science

University of California, Los Angeles Ecology & Evolutionary Biology

University of Colorado Structural Biology & Biochemistry Program

University of Iowa College of Medicine Degree Programs

University of Maryland Biophysics Program

University of Massachusetts Dartmouth Marine Science and Technology

University of Michigan Medical School Program

University of Pennsylvania Graduate Program in Biology

University of Pittsburg Biological Sciences Programs

University of Rochester Graduate Program TEAM-BMTD Department of Biostatistics and Computational Biology

University of South Florida Graduate Programs

University of Texas South Western Biomedical Sciences Programs

University of Utah Bioscience Programs University of Virginia School of Medicine

Upstate Medical University

Graduate Studies I M.D./Ph.D.

Van Andel Institute
Ph.D. in Molecular and Cellular Biology

Vanderbilt University Neuroscience Graduate Program

Virginia Tech

Molecular and Cellular Biology Ph.D. Program

Watson School of Biological Sciences Ph.D. Program

Wake Forest University M.S. and Ph.D. in Biology

Helpful Links

- Athletics
- **❖** Biology Department
- Center for Excellence and Teaching
- Center for Study Abroad
- Counseling Center
- Dining
- Directory
- English Language Program
- **❖** The Greene Center for Career Education & Connections
- Facilities
- Journal of Undergraduate Research (JUR)
- Kaplan Test Prep and Admissions
- Libraries
- Multidisciplinary Studies Center
- Pre-Med and Allied Health Professions Advising
- Research Connections Newsletter
- Rochester Academy of Science
- Undergraduate Program in Biology and Medicine
- Undergraduate Research Office
- University Health Services

Feedback and Submissions

Have any interesting stories or events coming up you want featured in future newsletters? Please let us know! We would also love to hear your feedback so that we can improve upon future newsletters. You can email marcella.sherlock@rochester.edu with comments, questions, or concerns.

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