

February Edition

February 5th, 2021

Volume 2, Issue 6

COVID-19

[HUB AT HOPKINS](#)

[JHU COVID RESOURCE CENTER](#)

[MARYLAND DEPT OF HEALTH](#)

[CENTERS FOR DISEASE CONTROL](#)

The Johns Hopkins campus remains under Phase 1 restrictions. Please continue to follow safety guidelines and help keep yourself and your colleagues safe!

COVID-19 Vaccination Campaign

All staff members are eligible for a COVID-19 vaccine. Be sure to sign up for a MyChart account and fill out the questionnaire. For more on the vaccination campaign, click [here](#).

Upcoming Events

Feb 5: Department Seminar at Noon

Aanishaa Jhalidyal
Ekaterina Kabin

Feb 12: Journal Club at Noon

Feb 19: Department Seminar at Noon

Junhua Yang
Brittini Moore

Feb 24: Guest Seminar at Noon

Dr. Randall Roper, Indiana University-Perdue University Indianapolis
Windows of Development for Genetic and Pharmacological Intervention in Down Syndrome Traits

Feb 26: Journal Club at Noon

Welcome!

Kelly Summers from the University of Saskatchewan in Canada has recently joined the Lutsenko lab as a new Postdoc.

Welcome to the Physiology Department!

Tweet, Tweet! Follow Physiology on Twitter

Our department is now on [Twitter](#)!
Follow us, our Twitter handle is

@JHMIPhysiology!

Correspondence with Aanishaa Jhalidyal on behalf of the Twitter Team

“Please share with us details if you have a new publication, award, or anything important to highlight. This platform was created to embolden the voices of our department members and give them an official page where they can showcase their talents to the world. The meteoric rise of academic Twitter— which is now a community of its own—is an amazing place to not only share your talent, but also to look for jobs, discuss science with likeminded scientists, raise a concern, learn new things, and many times even share failures.

I highly recommend sharing anything you are proud of with us or what scientists in Twitter are calling it these days #humblebrag 🙌”

Q: Who should Physiology department members contact and how if we would like to include something on Twitter?

Contacts: Aanishaa Jhalidyal, Jiachen Chu, and James Osei-Owusu

Physiology Newsletter

Cellular and Molecular Physiology PhD recruitment held with a (virtual) twist

While last recruitment simultaneously feels like a year ago and yesterday thanks to the pandemic, it's time once again to flex our fantastic features to our future physiology family.

Erica Avery

5th Year Graduate Student

As with everything else in our lives that has been completely transfigured by the pandemic, recruitment of new students to the Cellular and Molecular Physiology PhD program is no exception. The process will look a little different this year, but that doesn't mean that we still can't show the prospective students what the Physiology Department is all about. There may not be a happy hour for members of the department to stop by during an incubation step in a protocol, juxtaposing the sight of recruits shaking hands in their finest interview suits with current lab members in their sweatpants and active wear with timers clipped to their belts (where the new students will soon find themselves). Regardless, it's impossible for the eccentric and diverse personalities, engaging scientific minds, and collaborative atmosphere to go unnoticed.

Despite our unmistakable qualities, it will be a challenge without the eight recruits physically on-campus to get a sense for themselves what everyday life is like in the physiology department, thus we as a community are called to work harder to help do just that. With Dylan Sarver, Brittini Moore, and Mackenzie Kui at the helm, there's no doubt we'll be able to communicate enough of what the recruits need to realize we can be their new home.

Most of the recruitment day will be interviews with various faculty, interrupted with a tour and break. The latter part of the day will conclude with our usual “elevator pitches” from lab members and Zoom social time with current students to replace the usual socialization at the bar, student lunch, and department happy hour. When I personally interviewed for CMP, the Claypool lab was honestly not on the top of my list for a rotation, but not only did I rotate, I joined. I have my PI to thank for convincing me that mitochondria were more than just the powerhouse of the cell and looking back, I know I ended up where I was meant to be. We can't wait to meet the scientists who will join our ranks (and what nicknames our custodian Reggie will give them.)

A Physiology Farewell

Michelle Acoba graduates, heads off to postdoc at UT Southwestern

“Seems like it wasn't so long ago when I used to get confused every time I turned a corner because I always ended up in a different building. I will miss the space in second-floor Hunterian that I called home for the past years. It has been a joy interacting and working with the people in the Physiology Department, who have all been incredibly supportive. I am grateful to have met all of you!”

-Dr. Michelle Acoba

“Michelle was such an easy graduate student to mentor. All I needed to do was give her space and order things that she needed; Michelle did the rest! Such a smart, hard-working, invested, organized, and humble young scientist. Feel extraordinarily lucky to have worked with you for the past 5 or so years. Wish we could continue doing so, but I know it is time for Dr. Acoba to climb the academic ladder. Maybe I can work in the Acoba lab when I retire!”

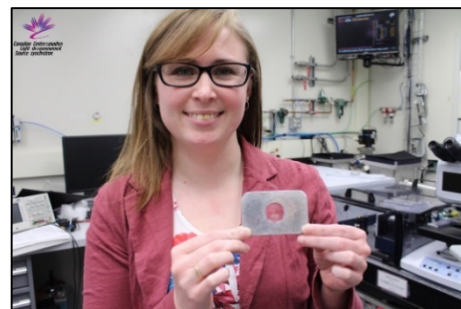
-Dr. Steven Claypool



Michelle's virtual lab celebration for her thesis defense.
-Photo courtesy of Steven Claypool

Welcome to the Team

Partings are such sweet sorrow, but new co-workers and friends are joining the Physiology Department as well!



-Photo courtesy of Kelly Summers

“I am originally from Aylmer, Ontario, Canada. I received my PhD in 2020 from the University of Saskatchewan, Canada. My PhD research investigated the role of copper in the Alzheimer's disease brain and how copper might be targeted using copper chelating drugs. I am very much looking forward to joining the Lutsenko lab and the department as a new fellow.”

-Kelly Summers

PSam awarded Martin Luther King Jr. Community Service Award

Pingdewinde Sam (PSam), sixth-year graduate student of the Claypool lab, was one of ten recipients across JHMI to win the [2020 Martin Luther King Jr. Community Service Award](#). He founded Teêbo to give back to people in his home country of Burkina Faso in West Africa by helping eliminate poverty and hunger, improving literacy, and combatting water-related diseases. The organization's exam prep program has tripled the passing rate for sixth grade-students on the country's national exam. PSam has helped many rural villages dig wells to access clean, drinkable water. He also mentors underrepresented minority students in STEM subjects.



PSam (second from right) participating in the opening of a new well in Burkina Faso.
-Photo courtesy of PSam

Dr. Chad Ruffin's seminar catharsis for disabled community at Hopkins medical campus

Opinion: Validations from a successful, deaf cochlear implant surgeon were words I've been waiting a long time to hear as a disabled student

Erica Avery

5th Year Graduate Student

On Jan. 19, the trainee-led Equal Access in Science and Medicine committee (EASM) in partnership with the Johns Hopkins Disability Research Center hosted a seminar by Dr. Chad Ruffin entitled “A Deaf Surgeon Comes Into His Own:

“Any department personnel associated or departmental news with a short description can be sent to anyone of us. Also, you can use Slack to send it directly to the Admin.”

Q. What types of content do you intend to be highlighted on Twitter?

“We want to highlight the people of this department and their amazing work— inside or outside academia— through our Twitter page. It is supposed to help give faculty, graduate students, and postdocs a platform to advertise themselves.

Every department-associated accomplishment of students, faculty, or other affiliations are welcome. We use it to advertise upcoming seminars for now. We are very interested in starting a student highlight.”

Reporting by sixth-year graduate student Kelli Johnson

Contact Us

Newsletter Team

[Kelli Johnson](#)

[Erica Avery](#)

Physiology Department

[Physiology Website](#)

Insights for Improving Outcomes with Hearing Loss”, attended by an impressive 190 spectators. Ruffin is an ear, nose, and throat (ENT) surgeon, or otolaryngologist, who spoke about his journey as a deaf patient, surgeon, scientist, and hearing technology innovator.

EASM was co-founded by Physiology’s own Anna Moyer, a sixth-year graduate student in the Reeves lab and I have personally worked with the Disability Health Research Center in tandem with EASM on some of the recent endeavors to spread awareness, create community, and promote inclusion and diversity around disability.

You may be thinking, “A deaf surgeon who works on cochlear implants, now there’s something you don’t see every day— what a synchronicity.” To that I would say, that’s exactly why disabled diversity in science is important. These conversations are critical. Ever since I was diagnosed with a chronic illness in 2012, I’ve been an advocate for patient-scientists— we’re the community translational research serves to benefit and many of us feel we’re the ones with “skin in the game.” To us, Ruffin’s role is a no-brainer and he shouldn’t be unique. Of course the deaf community should be involved in helping deaf patients and refining their treatment options.

After two years and about 30 interviews since graduating medical school, Ruffin was admitted to an otolaryngology residency program to gain the experience necessary for his surgical specialty.

“You can’t go through that much opposition and lack of invitation without wondering, many times, if you really belong in a field,” Ruffin said.

“I felt like I had been denied a seat at the table that my implant was supposed to give me”

Who could belong in his/her field more than Ruffin does? Ruffin had the one experience no one else had among his peers and arguably the most invaluable qualification—having the lived experience of the people they’re supposed to be trying to help. However, this isn’t always as obvious to the able-bodied clinicians and scientists who work on our illnesses and conditions. Ruffin spoke to his experience with ableism—a disease plaguing academia in itself.

“I sat on the sideline and watched my colleagues get into the top programs with similar credentials and I felt like I had been denied a seat at the table that my implant was supposed to give me,” Ruffin said.

Ruffin speaking about being a deaf ENT validated those feelings of our community being called to contribute to the biomedical sciences. Whether we work on our own disability, a loved one’s condition, or an illness we have no personal connection to, we’re the ones who know what it’s like to live with an affliction and/or understand the associated needs. Moyer works in Reeve’s Down Syndrome (DS) lab and has a brother with DS. I have a friend I found through disability advocacy who studied her own disease, myalgic encephalomyelitis, at Stanford. Many foundations for various disabilities are started by families who’ve had a loved one affected or killed by the condition in question. Patient-scientists and -providers often feel a responsibility as people gifted with biomedical inclination to help our own communities when most patients are at the mercy of researchers and clinicians, praying for answers.

“I’m excited that there’s so much interest in our seminar series and I hope to see more diversity and inclusion events focusing on disability in the future,” Moyer said.

While there’s still a long road ahead of the disabled community in academia, I’m proud that Hopkins, with the help of EASM and the Disability Health Research Center, is taking these steps. A recording of the lecture will soon be available on the [EASM website](#). I recommend watching his and future EASM lectures, along with supporting future disability-centered endeavors to help understand our underrepresented disabled colleagues.

Awards and Fellowships

Ljubica Mihaljevic, fourth-year graduate student in Dr. Qiu’s lab, won the Boehringer Ingelheim Fonds (BIF) PhD fellowship. The fellowship was awarded to Ljubica for being an outstanding junior researcher carrying out an ambitious scientific PhD project in basic biomedical research at an internationally leading laboratory as a European citizen working overseas.

James Osei-Owusu, sixth-year graduate student also in Dr. Qiu’s lab, won the Biophysical Society (BPS) travel award for a platform talk at their annual meeting. The award is to recognize excellence in biophysics and promote greater interaction among biophysicists throughout the world.

Congrats Qiu lab for dominating awards and fellowships! We’re all proud of you!

Publications

Blog Posts and Journalism

Erica Avery, fifth-year graduate student of the Claypool lab published an essay for the American Chemical Society grad student and postdoc blog on [“Navigating Mental Health During a Pandemic”](#).

Alex Maya-Romero, post-baccalaureate fellow of the Claypool lab published an essay for The American Society for Cell Biology entitled [“What Are Post-Baccalaureate Programs?”](#) to educate others about the benefits of such programs.

Svetlana Lutsenko and other copper experts were cited by the *Washington Post* regarding [copper, immunity, and the use of copper-containing masks as an anti-COVID measure](#).

Manuscripts

James Osei-Owusu published his work regarding [PAC regulation of endosomal acidification and transferrin receptor-mediated endocytosis](#) in *Cell Reports*.

Mark Anderson’s lab published a mechanism linking [atrial fibrillation and diabetes, an independent risk factor for atrial fibrillation](#), in the *Journal of Clinical Investigation*.

Just because they’re gone, it doesn’t mean they are forgotten! Brian Poll—a former grad student from the Pluznick lab now a postdoc at the NIH—published findings from his work here regarding [the role of microbiota-derived acetate in the cardiovascular response](#) in the *Journal of Pharmacology and Experimental Therapeutics*.

Dylan Sarver’s research connections at University of Michigan are still proving fruitful with a paper concerning [ontogenetic and in silico models of spatial-packing in the hypermuscular mouse skull](#) published in the *Journal of Anatomy*.

The Rao lab rounds the department off with a pair of papers, the first about [reversing EMT in breast cancer by epigenetic modification of SPCA2 and calcium signaling](#) while the second is a perspective piece by Dr. Rao on the cellular process of lactation (cleverly named: [“Milk on the Moo’ve”](#) in *Cell Calcium*!)