



Bachelor of Science in Public Health Fall 2022 Newsletter

BSPH/MPH Dual-Degree Track Directors Speak by Rose Thornquist

We launched the dual-degree BSPH/MPH Program in 2021. In our first cohort, there are three students who graduated with their BSPH degree (Class of '22) and are now taking MPH courses. They are expected to earn their MPH degree in May 2023. Behind them, our second cohort of 14 seniors are currently taking a combination of BSPH and MPH courses. Rose Thornquist interviewed the three MPH "Track" Directors who oversee each MPH specialization (or track): epidemiology, global health equity, and public health policy and management. These interviews reveal each track's unique character and distinctive career possibilities.



Dr. Abigail Silva received her undergraduate education here at Loyola University Chicago. Dr. Silva was pre-med but majored in Spanish Literature and minored in Chemistry and Theology. After graduation, she took a "gap" year to study for the MCAT and work. However, that summer, Dr. Silva was accepted into the University of Illinois at Chicago's (UIC) Summer Enrichment Program in the School of Public Health. She recalls falling in love with this scientific field that focused on improving the health of whole populations. Shortly after, Silva pursued her MPH. She then worked as an applied epidemiologist for more than a decade before embarking on her doctoral studies in epidemiology at UIC.

ABIGAIL SILVA, PhD, Epidemiology Track Director, Associate Professor

How many classes will be online, in-person, or blended for students on the epi track?

All the core classes are taught online. In terms of the epidemiology track-specific courses, we have a range. A few are blended courses (partially online and in-person) while some are delivered fully in-person or fully online. In-person classes occur at the Health Sciences Campus.

What would you say to students on the epidemiology track who aren't sure what they want to do yet but want to gain skills in public health?

The quantitative and writing skills that you gain in epidemiology are very marketable. Use your practicum as an opportunity to explore a potential employer or position. Students should also take advantage of the various career-related workshops that are offered through the program.

What are the main domains of epidemiology?

Epidemiology is considered the basic science of public health. It is a quantitative discipline that relies on a working knowledge of probability, statistics, and sound research methods to understand factors that contribute to disease states. It is also used to understand the health of populations and inform decision-making about policies and resource allocation.

What can students in epidemiology do after they get their MPH?

Epidemiologists are critical to the work of public health departments and the Centers for Disease Control and Prevention. They can also find opportunities in academia, the private sector (e.g. pharmaceutical companies), and the nonprofit sector (American Academy of Pediatrics). Positions may include research associate, hospital/clinical epidemiologist, infection prevention practitioner, pharmaceutical epidemiologist, applied epidemiologist, or statistician/analyst.

What is your favorite thing about Parkinson's MPH epidemiology track?

We have faculty members with a wide range of research and work experiences. Students should tap into them for research opportunities or to learn more about opportunities in the field.



Dr. Amy Luke received her undergraduate education at the University of Maine at Orono and majored in Food & Nutrition. Dr. Luke took a few years off and worked in the food industry before heading back to school. She did not complete a master's degree but went straight into a doctoral program in Human Nutrition and Nutritional Biology at the University of Chicago. Her research focused on a method of measuring energy expenditure called doubly labeled water. Dr. Luke spent 5.5 years in the lab and decided she wanted to work with humans, so she accepted a post-doctoral position here at Loyola in the Department of Preventive Medicine and Epidemiology. Dr. Luke brought the objective methods she learned in her doctoral studies to the field of cardiovascular epidemiology. She has been at Loyola for nearly 30 years.

AMY LUKE, PhD, Global Health Equity Track Director, Public Health Sciences Department Chair and Professor

Ratings are on the rise for Parkinson's MPH program. What do you believe is the reason for that?

I think the small student-to-teacher ratio and our faculty's attention to our students is, in part, one reason why our MPH program is doing well.

How is global health equity related to social justice?

Global health relates to the health of all, from the local to the national to international. By working to improve health for all, those populations living on the margin are definitely impacted.

What are the main skills global health equity students are going to gain in this track?

I hope the students leave the global health equity track with a solid understanding of program planning and evaluation, as well as strong writing skills. We also work with large datasets in our maternal and child health (MCH) course, so students gain skills in epidemiology and in policy and management. Think of our global health equity track as a blending of our epidemiology and public health policy and management tracks, but with a focus on MCH.

What careers can students in global health take on when they get their MPH?

Most of our students are working in the US, including many in local health departments, in positions such as grant writers, or coordinators for research programs. We have had one graduate working in a local refugee organization. Many of our grads have gone on to medical school (or are in our MD/MPH program) or to Ph.D. or DrPH programs. Approved in 2018, the global health equity track is newer than our other two tracks, so we have fewer grads.

What is your favorite thing about Parkinson's MPH global health track?

My favorite thing about the global health equity track is the passion the students have for learning about and trying to address social justice issues. In addition, the students bring a range of experiences to our classes, making the exchange of ideas really exciting.



Dr. Talar Markossian received her Bachelor of Science in Biology at the American University of Beirut where she continued her education, later earning a Master of Public Health (MPH) in Health Services Administration. After her MPH, she completed a Doctor of Philosophy (Ph.D.) degree in Health Policy and Administration at the University of Illinois at Chicago.

TALAR MARKOSSIAN, PhD, Public Health Policy and Management Track Director, Associate Professor

Contrary to other tracks, this degree can be completed entirely online. Can students on this track choose to take some classes in person?

Yes, certainly. In addition to online courses, some of the MPH Core courses, which are courses that all MPH students must take, are offered in person or blended (partly in person and partly online) formats. Students can also choose to take in-person classes from the Epidemiology track or from other programs around LUC campuses for their six credit hours of electives. With that said, one of the MPH requirements is a practicum or applied practice experience. Like an internship, a practicum is an in-person experiential learning opportunity at a site of the student's choosing, which may or may not necessarily be local to the Chicagoland area.

How relevant are current events going to be in students' public policy classes?

Very relevant, most faculty in our program are engaged in various levels of health services and health policy research, practice, and/or advocacy, and we all bring our experiences to the classroom. We also update our course material and examples, when appropriate, according to current events. We encourage students to stay up to date with the current policy environment.

What would you say are the pillars of public health policy?

The pillars of public health policy are the use of health services and health policy research to inform public decision-making; advocacy for just policies; and improvement of population health and the value of health and public health services. By value, I mean improving health outcomes and quality of care while reducing healthcare inefficiencies.

What does a career in public health policy and management look like?

Health policy and management graduates have wide options to choose from. Employment options would vary based on individual preferences and the track orientation (policy or management) they chose during the program of study. Options vary from, say, policy or research analyst positions in health systems or insurance companies to early/mid-career management positions in health systems or in public or nonprofit health centers.

What is your favorite thing about Parkinson's MPH public health policy track?

One of my favorite things in the program is the diversity of backgrounds of our students. We have students from different disciplines; some have clinical degrees, some come from social work or environmental health, some students have full-time jobs and others are full-time students. We also have faculty who have a passion for teaching, advising students, and connecting students with relevant projects.

Rose Thornquist is a senior BSPH major and is pursuing a MPH in the Loyola BSPH/MPH dual-degree program.

BSPH Program Director's Note by Julie Darnell, PhD, MHSA



I had the privilege of attending Dr. Mark C. Reed's Installation Ceremony celebrating his Inauguration as the 25th President of Loyola. Two ideas stood out to me from his remarks. First, he challenged all of us to "**Age quod agis**," a Latin phrase that means, "Do what you are doing." For Dr. Reed, it's about bringing your full presence to every task. Dr. Reed also talked about "accompaniment," his guiding principle. It was an unexpected choice from our new president as one might anticipate someone in his position to talk about being a leader and getting out in front of all of us in order to lead the way. But accompaniment is about *walking beside*—not in front of—us. This is a welcomed approach, and one that aligns well with public health practice because we do our best when we walk *beside* communities, especially marginalized populations and the most vulnerable among us.

This newsletter is full of examples of our students bringing their full presence to what they are doing, whether it's engaging in an internship, studying abroad, pursuing a MPH in conjunction with their BSPH, conducting research, or writing this newsletter. We now have 124 majors in our BSPH program and I challenge each and every one of you to "**Do what you are doing side by side with others.**"

BSPH Students' Summer Recaps

Mikaela Lies (BSPH '23): *I had the opportunity to study in Córdoba, Spain. The program was fully immersive and allowed me to gain a new perspective on public health, specifically global health. With this perspective, I better understand the challenges of global health and the international challenge of aiming for the same goals yet under completely different circumstances. I have a newfound interest to focus on global health relating to chronic disease. I hope to carry this into my career and continue learning from other countries to broaden my understanding of disease and the different ways it can affect a population.*

Maya Roytman (BSPH '22): completed the [Mayo Clinic Summer Undergraduate Program in Biomedical Ethics Research](#). *At Mayo, I assisted with a variety of research projects regarding ethical questions in risk counseling for patients with epilepsy, under the mentorship of neurologist and sleep medicine specialist, Dr. Erik K. St. Louis, MD, MS. Other components of the program included weekly education sessions in bioethics, lunch-and-learns, and clinical observation opportunities. I shadowed clinicians in a variety of disciplines, including clinical ethics, pediatric surgery, otorhinolaryngology, neurosurgery, cardiology, transplant surgery, and OB/GYN specialties. Check out the program's Twitter page [here!](#) Applications for the summer 2023 cohort open in late fall 2022.*

Zachary Wilder (BSPH '23): *Last summer, I had the opportunity to work in Washington, D.C. for U.S. Representative Jan Schakowsky. Starting as an intern and then taking on the role of Legislative Correspondent, I worked closely with the Congresswoman and her staff on a variety of policy issues relating to public health. In particular, this opportunity included extensive interactions with the policymaking process, allowing me to better appreciate ways in which government agencies can work with stakeholders to improve health outcomes. One of these interactions even included coordinating response to the Monkeypox public health emergency across various departments of public health and local communities. This thrilling experience and the knowledge that I have gained through this work will be formative to my career as I continue to understand the ways that policymaking can improve the wellbeing of countless individuals.*



PUBH 310, Public Health Internship Course – Great Reviews!

[PUBH 310, Public Health Internship](#), our new practical internship course, focuses on organizational and community leadership through experiential learning with a non-profit organization, government agency, or business. Students will have 2.5 hours in class and work 10 to 12 hours per week for a minimum of 100 hours over the course of one semester. Using Loyola's e-portfolio platform, Digication, students reflect on their experiences in the context of leadership, organization theory, community engagement, and personal and professional development. Internships may be paid or unpaid, but, students holding an advanced student employment/federal work-study position must be employed by Loyola University Chicago in an on-campus or community-based federal work-study position.

The course is open to all BSPH students and fulfills one of two PUBH-BS elective course requirements. Please contact Dr. Cynthia Stewart (cstewart8@luc.edu) for more information and to enroll in this course for spring 2022. **Additional Resources:** View the recording links to the **Parkinson Professional Development Series** on Digication and Internships:

[“Learning Portfolios/Digication” Program Recording](#), Password: 4Parkinson!

[“Internships” Program Recording](#), Password: 4Parkinson!

Connect with our Research & Learning Librarian



Cara Forster, MLIS

Cara Forster is the University Libraries' liaison to Parkinson's undergraduate programs. A Research & Learning Librarian, Cara comes to Loyola with a background in clinical genetics research, health education, and information justice. They provide classroom instruction and/or 1:1 consults related to research and scholarly communication. They can also help to navigate library resources, diversify course materials, clarify issues related to Copyrights, Open Access, and Fair Use, and so much more! Reach out to them with your library questions and curiosities at any time: cforster1@luc.edu

Professional North Shore Mosquito Abatement District *by Tatiana Pasewark*

Dr. Mark Clifford is the director of the North Shore Mosquito Abatement District (NSMAD), a place where I spent a summer as a research assistant collecting mosquitos, setting up traps, and analyzing/ cleaning up data. Like (seemingly) all of us in public health, where we start is never where we end up; Dr. Clifford himself described his entry into mosquitos as serendipitous. He knew that he wanted to obtain a graduate degree in biology, but beyond that he was unsure of his specific field. It just so happened that at one of the universities he was considering, a professor in a lab he did not even apply for reached out as he was looking for a grad student to join him in his work in mosquito physiology.

In between his grad and undergraduate work, he also spent 8 months in Costa Rica as a regular ole' Jane Goodall researching the interaction between Capuchin monkeys and humans, to better understand how animal disease can make the jump to humans. Public health is global, it is ubiquitous to anywhere that humans, animals, or plants are. As industrialization takes over, and as the built environment continues to encroach into the natural environment, interactions between animals and humans increases, making zoonotic disease a greater threat than ever before: Ebola, West Nile, SARS, and most recently, COVID.

Then, we got into the work of the North Shore Mosquito Abatement district. Their primary goal is to protect the public from mosquito borne illnesses via monitoring, spraying, and preventing mosquito breeding. They also focus on nuisance mosquitos—those pesky little guys that leave behind an itchy bump but not disease. They have a large effect on quality of life and economic activity—driving people to stay indoors.

Often public health is about prevention; however there needs to be redundancies in the system that ensure public health institutions have the ability to respond to outbreaks, something the NSMAD has. They monitor, watch, and respond to outbreaks which happen every few years. And when a district or system is unprepared or underfunded, there can be catastrophic consequences. For instance, he spoke about Miami and Dallas which had a large reduction in budget, and then saw horrible outbreaks such as Zika in 2016, meaning there were horribly unprepared. Due to this, and the realization that public health institutions cannot be underfunded, these cities basically had to entirely restructure and build their programs back from the ground up. A key tenant of public health is that prevention is key; it's more effective, cheaper, and overall, it is more conducive to a healthy population.

Dr. Clifford and I also discussed the effects of climate change and globalization on mosquitos and mosquito borne disease. As there is more interaction and travel, combined with warmer temperatures and longer warm seasons, mosquitos are spreading. Invasive species that used to be foreign and rare, such as *Aedes albopictus*, also known as the Asian Tiger Mosquito, or *Aedes japonicus*, a vector of Japanese Encephalitis, are being found more and more often outside of their native environment, potentially brining new disease with them.

Another responsibility of the NSMAD is to monitor for ticks. The Midwest used to be tick free, but once again due to globalization, now they're abundant, increasing the risk of disease such as Rocky Mountain spotted fever and Lyme

disease. At the time of the interview, there had been no reported cases in the district. Cases this summer were very average, and Dr. Clifford emphasized that if there was an outbreak, it would be in an 8 to 10 week period around July. Next, we went into the fun questions! Dr. Clifford likes to read Stephen King novels, his favorite movie was Dune—despite the horrible version produced in the 80's! A crowd favorite this year and according to some, what Star Wars was based on. His favorite disease is Red Guinea worm because of its near eradication. While it used to be endemic to many areas, a simple intervention program spearheaded by former president Jimmy Carter, has led to its near eradication. By putting drinking water through a simple sieve, or even a piece of fabric, larvae can be filtered out, thereby preventing human ingestion and the continuing of its lifecycle. Moreover, this intervention is cheap and accessible. It also doesn't require much convincing due to its relatively simple nature.

While it's difficult to engage the public, but citizen signs could be the next step and is something that Dr. Clifford wants to work on. In general, the public needs to be educated and aware of things around their home that could hold water. After all, it doesn't take much to produce thousands and thousands of mosquitos. By keeping standing water around homes, even small containers, mosquitos can breed with extreme ease. This is very much a community effort; if just one home has a kiddie pool breeding mosquitos, the entire community is at risk, emphasizing the principle of public health that interventions at a community or population level are more efficient than the individual interventions.

And don't fret! The NSMAD is always looking for interns and research assistants—in the summer anyway. I can speak from experience that it's a great way to engage with the community while having a mix of activities ranging from climbing in sewers, lab work, and emptying mosquito traps. After all, name a more useful skill than being able to identify mosquito species!

Tatiana Pasewark is a senior BSPH major and is pursuing a MPH in the Loyola BSPH/MPH dual-degree program.

Resources

Public Health Resources:

[BSPH Program Students Sakai Site](#)

[Public Health Job Board](#), this site serves to function as a central location for public health job opportunities, internship opportunities, and volunteer events for students and alumni.

[Career Services](#), phone: 773.508.7716, email: careercenter@luc.edu

[Handshake](#), schedule career/pre-health advising & coaching meetings, find jobs, register for career fairs and events.

Librarian for the BSPH Program, Cara Forster, MLIS (they/them), Research & Learning Librarian, cforster1@luc.edu; [Public Health Guide](#)

Parkinson Experiential Learning: ParkinsonEXPL@luc.edu

Parkinson Weekly Student Life Newsletter, contact: ParkinsonStudentLife@luc.edu

Student Support Resources:

[Parkinson School of Health Sciences and Public Health Student Handbook 2022-2023](#)

[Student Accessibility Center](#)

[Tutoring Center](#)

[Writing Center](#)

[Wellness Center](#), medical, mental health, and health education professionals committed to your well-being.

[Center for Student Assistance and Advocacy \(CSAA\)](#), an LUC centralized website for reporting student concerns.

Interested in Contributing to the BSPH Newsletter?

We are always looking for new content – and new contributors -- for the BSPH Newsletter. Please let us know about accomplishments we can celebrate, events we can highlight, organizations we can profile, and topics we can explore. As a newsletter contributor, students may hone their communication skills, network, and share their thoughts, interests, and ideas on a variety of public health topics. Email Keith Kramer, kkramer4@luc.edu.

For more information about the B.S. in Public Health program:

Keith Kramer, Senior Program Advisor, kkramer4@luc.edu

Julie Darnell, PhD, BSPH Program Director, jdarnell1@luc.edu

Know someone who is interested in public health? Please share this newsletter.