Admitted Student Visitor’s Day
Friday, March 13, 2020

>> More than ever before, you already know that
>> What we do together as a society to ensure the conditions in which everyone can be healthy. We
know there are no problems not related to public health this means you're entering a field that is
incredibly rewarding and which will always new and important professional challenges if you come to
Bloomberg School have the opportunity to work with faculty addressing these challenges had the
pleasure of interesting acting students seeing the impact of the research around the world and
witnessing the appreciation of the quality and expertise we're known for.
2016 we celebrated our birthday which makes us the oldest public health school, a lot that's changed
and we're committed to making others being in the field and educating tomorrow's public health
leaders.
And at any given time, there are over 2600 students that are registered in one of our educational
programs.
They come to us, from 79 counties.
Our faculty, 788 strong and they work in 67 countries around the globe. But what enables us to live to
our approximate says are over 25,000 alumni working around the globe they truly multiply our ability
to make a difference.
We hope, we can count on you, to be part of this incredible and growing network.
>> Across our ten departments, we have the ability to address every facet of public health as you can
see here, our expertise spans multiple disabilities everything from biochemistry and molecular biology
to health policy to mental health. But much of their research, um, and practice, that we do, is
organized, also around 80 centers over 80 centers that cut across these departments to tackle some of
the most pressing public health challenges facing us today I urge you to check out our web site to see
all of the centers, um, that we -- have here at the school.
Look at the, enormous range of what we're doing. I'm certain each of -- and pandemics put the
challenges we face toed are sobering for this reason, the sole remains on the forefront of combating
infectious disease our faculty champion vaccine science and access to these vaccines are Malaria
research institute is a state of the art community for multidisciplinary researchers to complete, control
and eradicate and the center for health security is leading the dialogue how to respond to the current
pandemic to prepare for the next one.
As an aside, you'll hear more about this later when Dr. Pekosz joins us I hope you enjoyed the Covid19
you can see the health security, watch our expert web casts listen to the new daily pod casts public
health on call.
All with a current focus on the novel Corona virus, while the diseases continue to be a focus of our
work we're tackling new 21 of the century public health challenges the Bloomberg health initiative is
focusing on five of these challenges, that are challenging American health with implications of, of
course, globally. These are environmental challenges obesity in the food system, risk to adolescent
health addiction and over dose as well as violence through the initiative, we are participating and
partnering with sectors outside of the traditional boundaries much public health to include criminal
justice, housing, education, transportation and, the like -- to better address the social determinants of
health. Because we know, that 80 percent of the disparities on the health outcomes are associated with
social and economic factors education income social support, health behaviors and a physical
environment in which we live.
Over the years, we are notable the school of public health is notable for producing public health trail
blazers here are a few examples of the contributions that have been made by the school community.
Abel Walman chlorinated water pioneered modern, Eve Mc Collun, and Rachel Carl son and Keerti
Shah linked HPV with the cervical cancer we remember Susan baker the field of injury prevention, Al
Sommer discovered the link between child mortality and vitamin deficiencies and noble Laureate Peter Agre, and our own, alumni, continue to contribute to the amazing representation of the school and they are leaders across multiple fields here in Baltimore here and around the country and the world. Take for example, Indu Bhusan the director of the general east Asia department of the Asian development bank, has served as the director of the Indian prime minister's initiative to expand national health insurance to over 500 million people.

And Shelly should and Dr. Bhardwag, deputy head of mission of doctors without borders and Neekta Hamandi working for the federation of American scientists on a myth bursting site about COVID-19 producing content for new organizations, members of Congress and as well as general public.

Kristi Ebong, is the VP the Orbita, a HIPAA application in health care and our own Lauren Underwood, U.S. representative in the 14th congressional district a little closer to home, and in recognition of women's history month, six women alumni of the school of public health here are currently Deans of other schools of public health including our own school of public health, demonstrating the far reaching impact we continue to have on educating the public health work force.

This handful of examples, shows the diverse array of careers available to graduates and impact the we're making across the public health industry. How do we get such great results why should you, choose the school of public health?

First, we are number one, ranked and we have been since 1994.

We are the first and the largest school of public health as I mentioned before, we have over 80 centers research centers and institutes around the school, we offer 11-degrees as well as 40 crest programs you can enroll in, to enhance your education beyond just your degree program.

We have over 500 courses on -- um, that we, we deliver on site. And, additional 265 online.

And I should say parenthetically this makes us especially well poised to respond to a need, to move, all of our courses online, in the immediate future and hopefully, for just the -- very near future. And, while we are large we embrace a personal and inclusive touch to education. Our student to primary faculty ratio is 5:1.

And while yes, we are proud of all of our achievements we are also, restless we don't sit back and rest on our Laurels we have a strategic plan designed to help us innovate and push forward, big ideas. This plan is focused on realizing the power of public health focusing on critical domains, of education, science, partnerships, people, and advocacy.

The work we are doing is part of the strategic plan, prioritizing diversity and inclusion, advocacy and communication and involves everyone at the school, to leadership faculty and staff, very importantly to students.

One specific activity related to the strategic plan, represents a unique opportunity for engagement of our students. SCIBAR is an initiative, that will promote team science and bring researchers -- sorry researchers from across the departments, together, to really address big problems in public health and, specifically, bring the basic scientists together with the applied scientists, um and -- work on these problems together.

Right now, 12 teams of faculty staff and students are competing for a diverse set, they're competing for four, one million dollar grants they're working on diverse set of issues ranging from hunger and building resilience in disaster effected communities to developing point of contact testing for Measles antibodies, that can be used to rapidly identify, individuals at risk, and -- targeting vaccination and outbreak response efforts.

Joining the Hopkins family means you get to know our city and the community we call home we have research, and practice partnerships across the city, from the mayor's office at city hall to community organizations, such as the BGati center in our own back yard we take these relationships seriously, provide opportunities for our students, to have meaningful interactions as volunteers, facilitated by source, which you'll hear a little bit more later.
Or through service learning opportunities, in the classroom. These interactions, plus exploring the city with your fellow students, finding your own, favorite spot for a crab cake I'll parenthetically say every restaurant in Baltimore, boasts the best crab cake to hiking trails and all of this will help you understand, why we love, to call -- this city our home. What starts here today, can take you anywhere, you want to go. We are training the future, health strategists. We have the curriculum, resources and connections to help you achieve -- your goals. I hope you -- I hope I will have the opportunity, to meet each one of you in person very soon until then -- we want to bring the school to you, in this video, which we hope, will give you a better sense -- of the energy, um of the school of public health and what a very, very special place -- this truly is. So with that -- I would like toes it over to David, who -- is, um, from the class of 2018, receiving his pH D in mental health. David? Over to you.

Good morning, good morning and welcome. I'm my name is Mike Ward associate Dean for enrollment management student affairs it is my honor to welcome you here today let me be the second to congratulate you on your admissions. You've done all of the work you've done the -- application, you've got the letters of recommendation done, so you have -- the GRE past behind you let me just say, you have -- um, you've made it. We're so happy, that you're joining. I just -- I just learned a few seconds ago there's 1600 people on this -- on this broadcast or this live stream so I'm really excited I started the day thinking, wow this could be a little challenging, um, but I'm so happy so many of you decided to choose to join us today and I want to congratulate all of you who are admitted and I hope to see you for sure in the fall. So, congratulations.

Let me tell you a little bit about Johns Hopkins the university in general. Um, it is 3 campuses you can see from the slides, but, it is really, um, a tremendous power house in the state of Maryland. Um, with campuses, in Montgomery County, downtown Baltimore several campuses in east Baltimore as well as the Homewood campus, nine schools that comprises with a variety of options in terms of internships places to learn and grow and develop. So -- it is a place that is vibrant and lots going on. Little bit about the school and the -- the support, and the services that we have -- our student services area we have allots of resources many of them are tailored for public health students and our career services and student life team, all of our professional staff members are, um, certified by international
coaching federation international coaching federation training program, so that we can help you, towards your goals, our orientation, is to work with people with challenges whatever those challenges might be, but -- we work with you on your goals, as well, in terms of supports, disability support services is another valuable support group, that works with you for accommodations should you need them. Additionally we have the student assistance program, the Johns Hopkins student assistance program -- we're starting a new shuttle which is going to be a shuttle with Lyft it is a smart shuttle the software you would get on Lyft or Uber one of these ride shares they will pick you up wherever you are it's not a route based shuttle it doesn't pick up up in ten minutes the plan is she will send a Lyft to get come get you new things are coming we start in July with the shutting you can see, here's a boundary area, for the shuttle you'll hear more in the Mindi's session and the panelists that are coming on later you can get some sense where people live shall you can get a nice range where you want to live and where it could be convenient for you. A couple of other thing I'll tell you -- our student organizations I will say -- students are a vibrant part of the school and very -- um, just -- just bring so much life to the school you can see, this is a listing of 40 -- this is a listing of some of the organizations typically we have anywhere from 40 to 50 student organizations, at the school, and -- if we don't have an organization, the university doesn't you want to try something different we're always happy to have you, set something up new and to, um, work to build community. But you can see a lot of these groups, are geared towards improving, community and improving life for our students as well as the world over all. So, today, today, we have virtual presentations. Um, that are going on here, right now. But also, in departments and programs. Some of the things that I often talk about is, when you're physically here is to ask the questions, get into -- go into the -- go down the hallway, find the people there I always remember, um, when I first met Roger McMekin, who is a chair of chemistry. I'm a guy who, doesn't have a science background, I remember the excitement, and the energy that came out, Roger was a very quiet, subtle guy he started talking to me about his research he started talking about how he builds teams I was really blown away. There's so much here, so much synergy here I hope you'll be able to ask as many questions as you want, you get the answers you need we hope you will understand and feel the passion we have here for public health. So thank you and I think I'm turning it over. >> Good morning, everyone, thank you for joining us today I want to introduce myself my name is Taryn the director of recruitment events at the Johns Hopkins Bloomberg School of public health I've spoken to several of you via email or the phone, um, I would like to formally congratulate all of you on your admission. Dean ward touched on career services and student life I wanted everyone to know we have posted some videos on your personal site, um, that way you can, um, learn about them, it is just introduction videos, um, but we're not going to stop there, we understand that you need to connect with our school and, right now it has to be done virtually. Um, and -- in order to, figure out what decision you're going to make. So, please note that today will not be the only opportunity you have to connect with us virtually. As Dean Ward said programs and departments have virtual sessions this afternoon, then they're also continuing throughout the next several weeks. Um, additionally, um, we also have a few more virtual sessions on the calendar, we being admission services and student affair offices we'll keep you posted on these sessions via email, we'll also put them on your personal sites as well. So we want to make sure you get all of your questions answered so that way you can make the, um the best decision for you. Okay. So we'll be turning on the chat function just so you know a little bit later during the student living in Baltimore panel at 11:30, but please know you can always email admissions services with any questions you may have, whether it's during the session or -- at a later point we'll make sure we get your questions answered. So without further delay I would like to introduce our next speaker.
Daniel is a full-time master of public health student, customizing his curriculum attaining 3 certificates in maternal and child health, adolescent health and global health. Daniel received his bachelor of science in human physiology, with a minor in medical Anthropology from Boston university in 2016 and spent two years of a executive director at the YMCA, an hour north of New York City, he supported child adolescent health, education and success. Daniel strives to start grass roots multidisciplinary collaboration between communities, community organizations and policy makers to dismantle barriers, preventing our future leaders from attaining the greatest amount of success. Daniel's dedication and passion for the field of public health are truly inspiring and we are thrilled to have him here to speak with you today.

>> Thank you, I appreciate it.
So, welcome everyone.

Um, sorry I cannot meet you in person, but -- I do have to say that I never a attended admitted students day not in personally hope you get to interact with our staff and myself as well. At the end of my presentation, I'm going to be providing you with my email address as well. So, we can interact on the individualistic basis so please interact and, first and foremost, congratulations. I'm probably the sixth person to tell you this today it is well deserved. Being able to be admitted to the number one school of public health is an opportunity and -- it is well deserving of the Accolades we provide you with, congratulate yourselves this is an experience that will shape entire career and we look forward to having you in my school. Some of my background and experience as Taryn said I'm from New York, it a very small community hour north of New York City in Putman county, you may know anyone from the musical theater fan, very small community around 8,000 people live within it, very proud of my hometown as well after I spent my entire life there, my family still lives there as well.

I decided I wanted something, bigger for myself. I decided I wanted something, that encompassed something greater than who I was, and something greater than my hometown, so, that's why I made the decision to -- move to about as ton. And experience Boston university as was said I graduated, in 2016, with a bachelor of science in human physiology, with a minor in medical anthropology and premedical sciences as well, lovely experience I loved living in Boston it gave me my foundations for city and urban living as well. After I finish mid curriculum in Boston and got my decree, I decided to move back home and I was offered the opportunity to become the executive director of our local YMCA camp Comb the people you see in this image the young people in the -- young adults are, now in high school (laughter) Okay. Which is wild to say these are children I grew up and helped to foster inside of my community. These are the reasons, why I decided to pursue public health ultimately. All of these kids had the opportunity within my community center to grow, to experience education and to experience outlet depending what their interests were I loved my community center it gave me the basis for what does community health look like. What does child and adolescent health look like? How can we afford the opportunity to our youth and our young adults to succeed in life, grow the educational opportunities. After two years working as executive director in my YMCA I decided to make a hard decision I decided to see, what can I do with my degree? I graduated with a degree in human physiology I wanted to know, did I want to pursue clinical medicine? Did I want to go into becoming a public health official did I want to pursue community health? It was all up in the air at the time I made the hard decision to step down I moved back to Boston where I work at Brigham women's hospital, this is the building for transformative medicine I became their senior medical assistant where I worked to enhance our medical education program specifically for, different medical assistants that were entering the clinic I worked with physicians encouraged me to apply to Johns Hopkins, at at the hospital, I loved, working with clinical medicine I
loved working on a team, I loved working in that aspect of, being involved and being in the moment. But, after reflecting after my two and half years of working at the hospital I missed the kids (laughter)

I missed the kids I missed working with youth I missed working with the school boards working with community organizations -- and being able to -- to combine them all together in my community center. So, I made that decision, and -- I decided to, pursue public health. So, now, as a full-time MPH student I'm working in the school of public health to own my abilities to work within communities to work with child and adolescent health as well, many of you might be asking, why JHSPH, there are so many schools of public health why pick this one? Let me go by the numbers, one year, so, as a full-time MPH student I have 11 months to finish my curriculum.

Which is, in two months I get to graduate (laughter)

So, having an 10 month program for the MPH was vital for me I loved my experiences of working in the community, I loved being able to -- jump right into the work force and having only 11 months to encapsulate a full public health experience was vital for me after this 11 months I could jump right back into the work force work with these kids again I can work with my local communities as well, this was a very important aspect. Two, three certificates as Taryn mentioned I'm pursuing 3 different certificates in my program.

If in the MPH I have the opportunity to customize or concentrate my curriculum. Concentrating your curriculum, has a whole bunch of different aspects within various departments at Johns Hopkins you can concentrate your curriculum in epidemiology or bio stat or concentrate if social and behavioral health and child and adolescent health so much different concentrations I wanted to customize I wanted to -- to combine my aspects with the aspect of community health cultural humility I decided to pursue 3 you're not pursuing MHP or any other degree opportunity you have the opportunity to pursue these areas. Mine are maternal health adolescent health and global health I'm utilizing global health for the frameworks dedicated to that cultural humility aspect that's how I'm customizing my curriculum, last but not least I have five advisers in this program, I'm most proud of that may seem very overwhelming for many people as an extrovert as a person that really loves to, meet different people, with different backgrounds, I have the opportunity to at Hopkins to mix and match with professors when you enter here, you will give be a summer adviser and this summer adviser will transfer into a academic adviser which is based upon your interests at Hopkins matched to you by your program administrators, so I have my summer, academic and then I'm currently pursuing two practicums both in Baltimore. And I have a different adviser for each of those and last but not least of a cap stone adviser, so five advisers in total is a great opportunity to meet more people and grow out your network with various professors here.

So, what is my current research? Um, many of you will be asking this question throughout this live stream about research assistantships I have to say that, Hopkins is very good about communicating various opportunities with professors to you, I'm a product of this.

When I entered as a summer student, after 2 months a big blog was given to me about different research assistantships that were offered within the community.

And, I was lucky enough to look through that research assistantship field I found one looking for a community organizer specifically. I have a background in that, working as an executive director at the YMCA afforded me the opportunity to grow as an organizer I messages the professor, it was Dr. Bishay in the population of reproductive health he was looking for someone to organize a coalition within east Baltimore, that prioritizes community health and gives different community members the opportunity to jump onto issues that may seem out of touch and issues like, health, homelessness, unemployment. Youth opportunity. All of these different opportunities seem so out of touch to community members we take those issues we break them down we try to actively engage our community so they feel like they're participating in creating solutions and innovating solutions as a group as a multidisciplinary work
force, so this, this product became the district one community health action network. Which we are slowly growing and which started in February in 2019. The second research opportunity that I had, is - I've had the opportunity to work with council man Cohen, in Baltimore city he decided to put a place of legislation on the floor of the city council, called the Cummings city act focusing on making trauma responsive care, um, accountable within our government, so -- essentially, the piece of legislation I helped to amend, and I helped to write portions of it through city and with Cohen's help, through the piece of legislation we decided to create a movement as well since we focus on specific institutions we built we decided to create a community component called the healing city Baltimore community aspect of it. We created healing city Baltimore we created this weekend of solidarity between February 7 and February 9th the weekend of solidarity 3 day event I helped to plan with, with a steering committee composed of our local community leaders in east and west Baltimore creating these platforms to inform the community about how important it is to understand, trauma, and as an upstream health influence effecting many different aspects of Baltimore city living so I -- have been so honored to work with council men Cohen and growing out this initiative further last but not not least my cap stone is within the center of Indian health I'm working with Dr. MiWalls, in my community in New York. Known as iconography we're talking about marginal decision and appropriation of indigenous community, that's what my cap stone is on, so some of my reflections.

These are some of my best friends at Hopkins these are different members of the, MPH program of the MSPH program as well I love the aspect of working with, different people, with various backgrounds. There are a couple of people in this photograph, that, also, have interest in child adolescent health they're all very diverse. The man directly on the right, is Dr. Omar Shakar a physician through Morocco through a Facebook page, that was started prior to my MPH program you have the opportunity to meet so many people I walked into this program thinking if I didn't make a single friend I would be perfectly okay. But -- that's a lie to my (laughter) I met many different people enhancing my experience I encourage you to not, limit yourself to just academics but to experience your classmates your peers, because they offer a wealth of opportunity and a wealth of vision that you might not have thought of prior to coming to Hopkins. Secondly, I created this panel, when we were in the process of the Cummings Healthy City, and I decided to create a panel encapsulated by Hopkins if you have any interest in creating if you want to generate different forums I promise you, that administration will offer you the opportunity to have that blank space and create for you. We have various lunch seminars that occur and I encourage you to attend some of these lunch seminars they range from COVID-19 to, aspects of epidemiology to aspects of abortion, child health homelessness you can experience those during your lunch time and, offer the opportunity for yourself to learn a little bit more outside of your curriculum.

And last but not least Baltimore -- I'm an Avid "New York Times" I use my dad's description to read every day to catch up on the headlines that occur, "New York Times" has promoted Baltimore a city of deficits. And scary city and I know many you are thinking this is a scary community to live in, I have to say that, that was my perspective when I entered this contradict program, I was able to interact with the community and talk to council men Cohen and SOURCE the community extension of Hopkins and different professors working in the community I recognized this is not a city of deficits this is a city of assets.

And, the moment that you could walk down the streets actually understand, Charm City living, will be a great opportunity for you to experience how we are not a city of deficits, we are city of health we're a city of these beautiful groups of diversity it made me feel safe and at home I've grown myself out from the community, definitely come and touch with the different aspects outside of this building of public health.

So, what are my after graduation plans? I'm excited to say that, I'm pursuing a fellowship with council man's office, I'm trying to run the Baltimore city healing initiative I want to experience how we can
encapsulate trauma and informed care, council man Cohen has presented an opportunity to work with him in my office. What is my advice to you? Last but not least -- it is to grow. Know that by being admitted to the program, you offer, a substantial amount of experience that will be able to grow throughout Johns Hopkins school of public health you have the ability to take all of the different aspects it's a lot much overwhelming information, grasp on the different aspects you find mean something to you, grow that out to encompass other activities for what Baltimore city has to offer you, this program has what you make out of it you come in and you're able to grow from it, you're able to experience exactly what is public health how could we offer that to various communities as well thank you very much for having me here I ask you, to please me send any of your questions I will happily answer them I'm very responsive via email, I hope I to meet you soon in person thank you so much.

>> We have a little time before the next presentation I'm going to ask a couple of to address, frequently asked questions we get from students in a time where, a lot of you may not -- will not be able to visit the campus, so -- um, Daniel if you could maybe just start with, um, talking about the online courses here, kind of how they operate, um, what it is like, um, maybe, how they evolved? Um, if you could just maybe touch on these?
>> That's great. So -- at Hopkins there are a ton of online courses some of the classes are offered, in person as well as online for the exact same course. So, there are, opportunities called live talks, which are really great experiences to interact with the professors and your peers. Um, we are on zoom telecommunication correct. Right. So through Zoom you have -- that's fine. But -- through zoom telecommunication which many use for the online courses you'll be able to have a chat function and raise your hand function it becomes an interest are active experience instead of a professor sitting in front of a camera, talking blankly to the camera, they're able to host discussions it is very much like having a community around you, so -- all you really have, to -- have, is a camera, and you have to have your class notes in front of you, the online educational system is very well adapted here and I think it is a very easy transition with this COVID-19 transition we've been having it's very easy to translate that to the online experience as well.
>> Great. Thank you. Okay. So another question we typically get from perspective students admitted students, are, um you know we're so large here. Well, I get lost, will I get lost with so much faculty, how accessibility are the faculty? Are they engaging can I just stop in and chat with them, so if you could touch on that?
>> Absolutely. So, I came from Boston university.
(laughter)
Which is a huge multidisciplinary research institution and, being in touch professors was difficult they were still accessible. Here, there's a faculty page if you look at Johns Hopkins faculty into Google it's the first link you can type in different faculty departments, and look into what the research interests are you can see their a reasonable doubt what their Accolades how long they have been a professor you can see what type of scientist or research they have been incorporating as well I highly recommending coming into the program with a list of maybe 10-20 professors you want to get in touch with, send an email out to those professors as well, I promise you that they will respond.
I started out with the list of 10 professors that I wanted to get in touch with, Dr. David Bashai was number one on my list he had a research assistantship opportunity I recommend tapping into this resource and figuring out exactly who you want to get in contact with, I promise you the professors that I talk with, I didn't think they would give me the time of day.
But, after messaging them and them responding in a day, two days or even a week's span of time I was blown away they would set up meetings they wanted to hear about my experience they cherish your experiences I promise you they want to hear from you and they want to grow what you want out of this program or out of the school of public health programs you'll be involved in?
(laughter)
>> Thank you Daniel. Um, so -- another question, we typically get I know you mentioned research assistant internships how do people come across those can you start right off the bat, a lot of students get here want to jump right in.
And, we are on a term it system maybe speaking on that as far as kind of using yourself in, getting used to term system meaning five terms throughout the year -- um, but then also, wanting to get involved in research assistantships how you handle that?
>> Absolutely, there is a forum for research assistantships that will be offered to you, once you enter the program.
Um, I came in, in the summer term. Because I'm a part of that full-time MPH program, after two months not hearing much about the assistantships there was a blog posted for different opportunities and the positions vary if you are looking for formal lab, Zika, there are a bunch of labs that offer that, if you want to work in various aspects whether with the community or ABCD, um, those opportunities will be afforded to you and you can actually look through a list of them but, also, I recommend, talking to faculty, reach out to faculty members with interesting research experiences even if they don't have an opportunity for you to join in as research assistant they may be able to connect you with other resources as well that's how I kind of, was able to, work with council man Cohen I talked with my professor at the time I reached out to Mr. Cohen myself, by taking the steps necessary to reach out to professors that you find a particular interest in, then I believe you will make the necessary connections the necessary networks, to find a position, that you would be ultimately interested in.
I've many friends pursuing multiple research assistantships I think there are more coming out right now, again I'm graduating in two months, we still get notifications about different research assistantships that are popping up on a daily basis.
>> Okay.
So I'm going to go back to the term system because -- um, some students, um, think it's great. Some students have a little bit of concern saying it -- they feel it might be too fast, um, and you know, am I going to be able to handle it, then we hear, usually once students get here and get used to it, they love it, they can take too many more courses I don't know if you could touch on that a little bit.
>> Definitely I love the aspect that we have, 7 weeks to a term.
Great.
That seems very scary many people are like it's going to be too rigorous the number one school of public health this not attainable to me I have to say I love fast paced environments you got into this school for a reason, I keep reiterating this you got into the school for a reason your organizational skills are probably -- very good, probably -- better than most people's. So, if you stay organized, and on top of your work you'll be fine.
(laughter) you'll be perfectly fine, 7 weeks to a term allows you to take more classes you have the a opportunity to audit some courses as well and you can kind of pick and choose whether you want to get a letter grade in some courses or, you would like to make this a pass fail or audit as well. So -- if it becomes, too much of a burden, to take all of these courses at once you have the opportunity to kind of pick and choose do you want that letter grade? Do you want to pass fail scenario? Do you want audit scenario as well? You have the opportunity to do so but I love the opportunity to encapsulate the work of the class for 7 week term, because it doesn't offer the opportunity to, get bored with the work reiterate different aspects that seem redundant I feel like I'm diving into the field of public health it is a very encapsulating with Joy and be grateful.
>> Thank you we have another question we'll get, what can I do to prepare for program in public health a graduate program, anything that, you did before coming to Hopkins that, made you feel like you were ready to hit the ground running.
>> Absolutely the course that's are offered are located online.
And, all of the faculty are located online as well. Do your research.
You can look into the school public health I highly recommend looking into the history of the school,
of the east Baltimore and I also recommend looking into the opportunities that you have. Start to plan out your curriculum. Look at the different aspects of different certificates, look at different aspects of practicum of cap stones of your requirements for your program and start to write it down. So try to figure out exactly how you could break down your experience here a little bit it doesn't have to be in-depth, again I'm a very type A person so mine was very in-depth curriculum, very much many peers changed entirely try to think what you want out of your program here I promise you all of that is located online.

And it is a huge database of information that you could tap into. And you can also, contact admissions if you want to. They're very reachable and they're able to answer many of your questions you may not be able to answer by looking online.

>> Okay.

>> Great. Thank you.

>> Thank you so much. Thank you so much Daniel for being here to present and good luck with the rest of your program and, we wish you the best with all of your future endeavors I want to make one more announcement before we ask Dr. Pekosz this session is being recorded we'll post to your personal sites so we understand this is a long 3 hour session so if you can't, sit in front of your computer for the full straight 3 hour you can watch the recordings once we post it and that will be available within the next few business days.

So, up next, I am delighted to introduce Dr. Pekosz who will be presenting this morning's seminar he received his Ph.D from the University of Pennsylvania -- and post doctoral training at Northwestern University.

He joined the faculty at the Bloomberg School of Public Health in 2007 and is currently professor vice chair in the department of molecular microbiology and immunology. He holds a joint department of a departmental health and engineer he co-directs the center of research and ongoing interest in emerging respiratory virus diseases he has been one of the faculty helping to communicate the current COVID-19 information to the public starting research projects on Vie have yous we're grateful to have Dr. Pekosz to present to you today.

>> ANDREW PEKOSZ: Thank you very much for that kind introduction. And, for the opportunity to come and talk to everybody here over the web obviously about my research, and some of the thing we're doing with the respect to the COVID-19 outbreak I'm sure we've all heard about I decided to split this talk up between those two topics seasonal flu and update with the update with the COVID-19 update and helping to deal with the outbreak on the campus.

So again my talk is split up into two sections the first is the seasonal flu I'll talk about some of the efforts that my laboratory has been involved in, to try to better understand, the flu disease and the seasonality, about halfway through I'll switch over and talk about the COVID-19 outbreak. About some of the -- the more recent updates in terms of what is going on with the virus I'll summarize some of the efforts that, Johns Hopkins Bloomberg School of Public Health faculty and faculty across the university, have been making, to try to dampen the effect of the pandemic and increase the awareness of it.

So let's start with the Flu, this disease in the human population -- okay. Recurring theme that I'm going want to emphasize to everyone is -- we think about Influenza, as it is one homogeneous disease that has set effects in the population, in fact the disease is anything but that. Starts with the number of virus that's can actually cause the disease.

So, Influenza is the disease. But you can actually have multiple kinds of viruses that are causing Influenza. They're called Influenza A, B and C viruses. The biggest emphasis we have are around the A viruses subdivided into viruses called H1N1 and H3N2s. Um, and all of these viruses induce a disease which has very none specific symptoms fever runny nose, cough muscle aches relatively short time course for disease.
Usually between 3-5 to 6 days for the disease to really have the disease run its course. What many of us probably realize, is how much Influenza, we deal with in the United States, as well as globally on the annual basis so there are estimates that, in any given year, 10-20 percent of the human population, is infected with Influenza, 10-20 percent.

In the United States alone, Influenza results in anywhere between 12,000 and 48,000 deaths annually. And if you take into account, time lost from work lost from productivity, there could be up to 7 billion-dollars, in loss of productivity, from our annual Influenza epidemics. All of these things just speak to the impact Influenza has in the annual outbreaks in the human population.

So I'm a virologist I cannot help but show you a picture of my virus. So here's one of -- representation of what Influenza A particle looks like.

I only want to touch on two really important thing about the virus that will be important for you to understand some of the work that I'll talk about later.

First, is the -- the virus is what we call a negative sense RNA virus.

Why is that important?

Um, in general, RNA viruses, mutate much more rapidly, than other kinds of viruses. So these viruses are constantly, in a state of genetic change and sometimes those genetic changes, can mediate changes how the virus behaves.

Another thing that is important to know about Influenza is, it has what we call a segmented genome not all are on one piece of RNA they're made up of 8 different pieces, similar to how humans have different chromosomes, that's important because that's another way that the virus can introduce, new diversity into the population because if two Influenza viruses infect the same cell can they exchange segments make viruses with different properties.

When it comes to the viral proteins I could probably for two days about all the different proteins what is important for talk today is the hemagglutinin, that's the protein shown in the purple like color on the surface of the virus particle this is the protein that the virus uses to attach to cells.

To enter cells and more importantly, Antibodies that bind to the HA protein protects you from the Influenza, protection.

Okay.

New, the Centers for Disease Control ear in the U.S. the world health organization globally spends an awful lot of time monitoring for -- seasonal Influenza every year here's one representation of type of data, that is collected on Influenza every year in this graph I'm showing you, percent of visits to health care providers for Influenza like illness, none specific symptoms associated with Influenza infection.

On the Y axis is the -- the week of the year, what I'm showing you in various colors here is different Influenza seasons.

And they range from 2015-16 in orange relatively mild season with a late appearance of Influenza. To seasons like 2014 and 2012, where you had very early peaks followed by, trailing off of the disease.

And then, years like 2017-18 which represents this red line here, where we had huge amounts of cases of Influenza, for an extended period of time and, um, increases in both hospitalizations and death.

So again Influenza varies from year to year even those -- in these nonspecific Influenza like symptoms are usually driven by the virus. How do we know that? Well because -- we ulcer veil Influenza virus at deeper levels in this graph, I'm showing you, numbers of Influenza positive speaks minutes again, over the same time period. Every year in these peaks in illness are correlated perfectly to activities with Influenza, shown by these virus isoolettes, Influenza, drives the illness in the population on annual basis.

This split up between A and B viruses, A is in yellow and blues are in green. What you should notice is that, there's two different, kinds of Influenza viruses driving disease this year.

So, early on you see a lot of Influenza A later on you see a lot of Influenza B you can see in this graphic in any given year in this case at least two viruses, that are causing that illness.

And if we break it down even further the A viruses have H3s and H1s, shown in Brown and red here. And you can see here, that in this particular year it is the H3 viruses that were the dominant virus.
causing disease. The Influenza Bs are split up into different viruses you can see one of the flu B is causing the disease this year. Even though there are four viruses that can cause disease this year we saw the disease population driven by two of them, Flu B and H3 virus. If we take our H3 viruses and do a more deeper analysis of the gene segments we separate them into four distinct groups these are given numbers and names, 22A1 and 2A2 and 3, are particular important viruses the further up you go the more diverse the virus gets the more mutations it picked up so you can see that viruses like the 32a1, are still H3 viruses but they, lump together as a very separate group they have accumulated unique mutations that are not present in the other two, 2A groups.

And there's even a third group, of -- fourth group of, viruses, down here that are very, very distinct genetically from some of the viruses circulating even when I say we had a bad H3 year, that carries with it a level of detail of, multiple strains responsible for that, maybe. All this contributes to the difficulties that we have in terms of selecting Influenza vaccines because the main reason we do all of this surveillance, is to pick vaccines Influenza. So Influenza is the unique viruses in that you can change the strain that is used in the vaccine on annual basis.

Most other viral vaccines like chicken pox vaccines, measles, mumps the same strain is used every single year.

Influenza can be changed. And, Influenza is changed because it can be changed every year, there's a five month process, between identifying a strain and making enough of that vaccine to distribute. That's one of the big limitations of our work within Influenza. Is we have to make decisions, in February and march about the vaccine strain before the flu season is over if we don't make decisions then, we won't have enough time to make enough vaccine to distribute to you know or annual vaccine campaigns.

So, all of that surveillance is really aimed at understanding -- Influenza virus HA proteins to choose vaccines.

Now six years ago with my co-director Rich Rothman we established the Johns Hopkins center of excellence in Influenza research and surveillance we wanted to look at the virus more deeply than just searching for vaccine strains. So, we wanted to use, situational awareness, programs and models that would predict where Influenza is occurring and when, to drive our sampling of Influenza virus, identify them with rapid diagnostics, utilize new technologies to sequence the viruses more than just for the HA segment to look at all of the gene segments. Identify novel viruses move them into a system where we can characterize both the virus as well as the antibody so we can better inform public health responses to the infection. The pipeline we have set up is fed by surveillance efforts that we have in 3 distinct geographic sites we do surveillance here at at the Johns hop kin university in Baltimore, Maryland we call this a northern hemisphere a seasonal population.

We have a racially diverse population and significant levels of Influenza vaccinations. We also do surveillance in Taiwan, and in the Chang Gung memorial hospital the vaccine is present there, this represents' sub tropical climate in that climate the Influenza seasons are different than when they are in the northern hemisphere we get to understand the movement between winter seasons.

And finally, we, um have a site in rural Macha, Zambia, the rural African population, it has no Influenza vaccinations represents a southern hemisphere tropical kind of climate that allows us to now look at a very different type of season and very different type of population to see what kind of Influenza circulates there.

Um, there's incredibly large group of people that contribute to our efforts I'll not be able to name all of them or give them credit I want to everyone know this crosses across every single department, every single school at Johns Hopkins as well as a number of international institutions.

So the one story I wanted to tell you in terms of our efforts, goes back to the 2017-18 season, and trying to understand why we had such a strong and such a long season here.

So our surveillance efforts in that year identified one interesting thing that popped upright away, if we compared virus circulate understanding 2016-2017 and to 2017-2018 you can see there was a change,
2A1 virus was circulating in the previous year. And that switched to a 2A2 virus being a dominant virus in 2017-2018. So we, immediately, thought well here we are. This must be one of the reasons why we had such a difference in flu seasons between 2016-2017 and 2017-2018 as in science, the case you see that very simple easy explanation it turns out it is much more complicated than just that. Because, when we look others looked the HA protein from 2A2 and, the other protein were identical in terms what they did. The flu vaccine in fact, worked equally well against that strain as well as this strain.

So, there were probably 10 times more cases of flu this year with the same vaccine efficacy, clearly just this change wasn't enough, to explain the large number of cases, that happened, in Influenza that year. Okay.

We do more than just look for HA sequencing we see sequencing of all the viral gene segments what I'm showing you here is just illustrating something really unique that we found that year. Here I'm showing you in color coding the viruses that circulated in that relatively mild flu season of 2016-17 and viruses circulating in that very severe 2017-2018 season, while in both years you had 2A2s, 2A1s and 3As circulating. I hope you can appreciate from our schematic here the viruses that the 2A2 viruses circulated in 2017-18 were genetically different from the ones that circulated in the previous year.

They had two gene segment that is came from this parent here, but -- 6 gene segments came from a different 3A virus. This is what we call reassortment.

In the flu world we -- we sort out, how many segments have been assorted with the 2.6 designation. Same was through for the PA virus, while the 3A viruses circulated in that year, had the same HA protein if you look at these colors you can see that the internal genes the other gene segments came from a different parent virus.

So, this tells us that the 3A viruses and the 2A2 viruses that circulated that year were very different from the viruses that circulated previously.

My lab utilizes a cell culture system we can take cells from the respiratory tract culture them in en vitro see how they grow in the environment we think is very important for your initial infection here are the cells they start off as non-discriminate. When you you can get these cells to develop the Cilia invitro you can see -- um, they look similar to what your upper respiratory tract looks like. We use these to look at our viruses compare all those well these could replicate in our culture we found something interesting in purple was the virus responsible for the strong outbreak in the graph we have infectious virus Titers on a log scale on the Y axis this is time post infection on the other axis and you can see that, purple virus that reassorted virus replicates to almost ten fold higher levels in these cultures either of the parental viruses that suggests this gene combination is somehow giving the virus an advantage it is making it better able to replicate, in human respiratory epithelial cells and that's what we think is driving, the -- the extra disease that we saw in that year.

It wasn't that the vaccine was mismatched more or less than the previous year. It was that the virus changed. It picked up new genes, and it made itself better at replicating, in the human, in human respiratory epithelial cells I told you stories are not as simple as you would think when we looked at the 3A virus and looked at its ability to replicate in the cultures we found that the reassorted virus, replicated exactly the same, as the parent 3A virus. So in this case, this reassortment did not give the virus a represent employee replication advantage. A student figured out how this reassortment may be advantageous to the virus I won't have time to tell you this, I have his paper listed here if you're interested in going to look at that.

So what I hope I've shown you is our efforts at looking at seasonal Influenza virus have really gone much past looking at vaccine strains and understanding genetic determinants in the virus that can control how much disease is caused in that population.

So now all of that working really fits quite nicely into our emerging COVID-19 outbreak. So I will
pivot a little bit talk about the school's efforts, in looking at COVID-19.
I'll talk about some of the things that we have learned about this disease and the several months that it has been in the human population.
And I'm going to go through some of the efforts that Johns Hopkins Bloomberg School of public health faculty are doing to help us prepare for the outbreak deal with the consequences of the pandemic now.
So many of you may have seen this map.
This is from the school of engineering here at Johns Hopkins it is showing in realtime, the number of confirmed COVID-19 cases that are appearing globally.
The size of the red, indicates the number of case that's are present within that geographic region or country.
So you can see, right now the massive amounts of disease that are being experienced throughout southeast Asia and middle east, Europe and now the United States.
This map is updated, on a realtime basis.
And you can go to the web site here -- and you can follow this as well as get detailed information about the numbers of cases occurring the recovered cases fatalities all those if you're interested in following the infection in a realtime way.
I told you I'm a virologist I cannot help put showing my pictures of a virus, here's a picture of the Coronavirus it has one main surface protein it's called spike this is the protein that -- allows the virus to bind enter cells it is also the protein, that, um if we generate anti bodies they can protect us from the infection.
And here's just the he will he being electron Micrograph, looks like.  These are Corona, because of the spikes on top because of the king's queen's spikes over the top of the particle.  So, there's been a lot of, interest in debate about the severity of the disease and why we're interested in, in -- why we're so concerned about COVID-19.
So this is one piece of data that I think is really, um, very, stark in terms of understanding, why we're concerned about the COVID-19.
This is simply a comparison of case fatality of rates, number of people who die over the number of people have been infected with the particular virus.  Seasonal Influenza is showed and compared to COVID-19 I already told you what a massive amount of concern of the Influenza concern, and what a burden is to the human population.  But if you calculate the case fatality rate for seasonal Influenza you can see it's relatively low in most populations kicks up a little bit in the elderly population.
If we try to do the same comparison, to COVID-19, you can see, that there's still a relatively low case fatality rate, look at the spike in severe diseases and deaths that occur in individuals over the age of 60 it is an large spike speaking to the vulnerability of the population with the infection of the virus.
There's debate, have you captured all the cases?  Are testings coming up with all of the cases that are there?  And how real is this number?  And I would argue that even if this number was off by a factor of ten -- which is probably isn't, um, you're still looking at a disease that is causing 2-3 times more severe disease across the population, than seasonal Influenza does.
So the Bloomberg School of public health very early on, garnered all of the resources and, started to be a center point in terms of the communicating information about the COVID-19 outbreak.
Here's just the central web site from the school of public health that really coordinates all of the efforts keeps people up to date in terms of situational reports and also, has a FAQ that gives you answers to some of the more often asked questions, about the COVID-19.
A lot of investigator here at the school are contributing to this effort.  I'm sure I'm going to leave out a huge number but I did want to call out a few people in terms of their specific efforts that they're doing right now.
First I'm going it talk about Justin shown down here he is an associate professor in the epidemiology department here, at Johns Hopkins.
He has had wonderful connections with the various cities and, public health departments in China.
And, recently published a fantastic paper, that looks at the number of COVID-19 cases in the city called in China. That was, um, an important city to monitor because, it had several cases imported from another city it can monitor the cases moving around, they were also doing strict monitoring at the time they can find new inspections occurring within that city, as result of travelers coming in. So they have been able to analyze -- um, a large number of cases, in that city. And if you come up with some really important numbers. They have shown that between the time you're exposed to the virus, and the time you show symptoms -- - it is about five days on average.
Um, before -- before you show symptoms. Okay.
97 percent of people who are exposed to the virus will develop symptoms within 11 or 12 days of infection.
Why is that important?
Well you'll be hearing a lot about a two week quarantine zone people exposed to the virus. So Justin's data is justifying that two week zone, that is basically saying if you quarantine someone for two weeks there's a 99 percent likelihood that person will show you symptoms before that quarantine is over is over that means we can now make the quarantine period accurate and as short as possible.
Because, you want these things to be short because -- the longer periods. Justin's work is important, they are quantifying and confirming the public health interventions put in place for COVID-19.
Beth is our assistant Dean for practice and training here at the school of public health. And she helped organize what we call pop up practitioner seminars so these are town hall events, students are allowed to come to. Um, they have done, at least 3 of these, the turn out has been amazing packed audiences and web casts that are also getting huge amounts of views. And, um, it is a combination here of having experts talk about this but also fielding questions, from the students that are in the audience to try to address any concerns that they have.
And the two people that have really been instrumental in these are Jennifer Nuzzo, assistant professor at the in the environmental health and engineering department at the school of public health and Lauren Sauer, professor of emergency medicine, at the school of medicine. And also was intimately involved in a lot of the work in the center of excellence for the Influenza research they have been fantastic in terms of providing clear information to the students fielding all the questions that are coming from the students with respect to their concerns about the ought break.
Jennifer Nuzzo is part of the center of health security which is environmental health and engineering department. That's a great focused around preparedness efforts and response efforts to major disasters. A large percentage of their work has been focused on -- pandemics and infectious diseases. Last summer they ran a exercise where they, they modeled out what a Corona virus outbreak would do, to the human population to business efforts in the population.
That modeling efforts in those predictions were early similar to what ended up happening now in December.
And, I was at that workshop, it is fascinating to see the problems that were identified then in terms of, the testing capabilities, reporting capabilities, supply capabilities, are all things that we're seeing right now in the COVID-19 outbreak.
So their efforts are really fantastically important, Tom is a director of that center and again there have been 3 people from the center have been really been the face of the centers approach to educating people about pandemic preparedness and response.
Again, Jennifer Nuzzo, Tara and Caitlin rivers 3, if you followed any of this on the news you I'm sure you've heard quotes from all four of these people.
Josh shown here is our vice Dean for public health practice and community engagement. He has launched into his education efforts by providing pod casts as well as web casts that are really focused on specific topics and here you've got his public health on call, where he is now up to 6 different episodes the relatively short.
Five to ten minutes each. He has picked a expert on a particular topic that talk about in detail that one topic related to COVID-19 he puts them up here so you can listen to them, at your convenience, um, and -- again focusing your discussion getting more in-depth understanding of certain topics. As they come forward.

The chair of my department, microbiology and immunology has been on the real forefront recently in terms of trying to garner efforts, to respond in some way to the presumed surgeon indicates es coming we'll see in the hospitals in the next few weeks. He is a fantastic scientist he is also a student of science history.

And he has written several reports, reminding people that for the longest time we could use sear rum from people who have recovered from an infection and give that serum to people who are suffering from disease and the Antibodies in the serum that will help those people deal with the disease and recover faster and reduce death rates he has been reminding people of this, he has not writing editorials he has been garnering resources and people to try to get these efforts going both here at Johns Hopkins as well as five other medical institutions also so that we can gear up and try to be better prepared, to deal with this outbreak by having some sort of treatment option, available either to treat the health care workers front line or try to treat the people infected and try to increase the survival rates in the populations aside he tweeted about this recently, asking for some help, in terms of, resources to help us move this forward and, as of this morning I had 20 laboratories from various Johns Hopkins schools, contact me directly and say, I can give you space we have people, that can be spared to go to this effort. It is a humbling response from the community here at Johns Hopkins, to the call for we have to do something and people stepping up and saying, not just that we will help but also providing firm examples of how they can provide resources, um and time to get this moving.

And then finally, you know, Johns Hopkins represents an incredibly diverse array of experts and -- um, on march sixth I was fortunate to take part with four other individuals, at a capital hill briefing on the COVID-19 outbreak you see this is Laura gardener, Lauren gardener, I'm sorry she is responsible for that realtime map that I started off this section showing. Her and her group have spent huge amounts of time getting that map up and going and being as accurate as possible. this is Lisa, she is an infectious control officer at the hospital she is really the point person for all of our efforts at coordinating the health care response to COVID-19 infections. This guy here in the middle needs to stop slouching a little bit (laughter) right next to him is -- um, this is Jason Farley he is a nurse practitioner from the school of nursing he spoke about those front line workers, that are going to be dealing with the patients, and -- the challenges posed to them, in terms of preparing for this outbreak. Here of course is Tom from the center of health security. This was a fascinating topic I can tell you the room had over 100 staffers in there, the staffers were engaged they were asking questions. Um, and as a lecturer I always look for eye contact from my students to see if people are paying attention the eyes were on us the entire time virtually by everyone in the room. There's engagement from the congressional side it speaks to the expertise that we have here at Johns Hopkins, that speaks to these problems.

So finally I just want to end with something that has been trending on social media this term, flattening the curve.

What we're looking at right now, is -- we ways that we can mitigate the impact of the COVID-19 pandemic, um, we'll speak specifically here in the United States. And, here's just a curve this is the number of severe cases on the Y axis and time on the X axis and time on the Y axis. Um, this dotted line here, represents the maximum capacity of our health care system to deal with severely ill patients. And what this demonstrates is without protective measures we may fly past the maximum capacity of hospitals to deal with ill individuals and then get into a situation where, people feel ill they cannot get the medical care they need to help survive an infection. With counter measures, social distancing and some of the other things that are coming into place right now, the goal of this, is to reduce this peak number of cases keep it under that dotted line of capacity
for our health care system to deal with severe patients. If we can do that, we won't swamp our health care system, and we'll make sure that people who are getting sick are getting maximum health care and treatment options. And therefore, will be more likely to survive the infection.

So, by dampening the peak keeping it under the dashed line we can extend and improve our response to the infection have a greater impact in terms of minimizing the severe disease that's caused bid this outbreak.

All right. With that, I'm back to my summary slide I really appreciate all of your time, in terms of letting me talk about this for a bit. If anyone has any questions, I'm always free to be able to be asked.

And, with that I'll turn it over

>> We're going to open it up for questions.

>> Great. Fantastic, okay. Great.

>> I'll leave this up here this is amazing more in terms of the graphic.

(laughter).

All right everyone we'll be turning on the chat function in the web cast. Just momentarily, so -- um, it is -- it's on. It should be on, any second now.

So, I'm going to go pass to my colleague Lauren we'll start with a couple of questions we'll open up to the participants.

>> Great. Thank you. Thank you so much for your talk, one thing I was wanting to know if you could talk a little bit more about is the role of translating research and what skills, students should seek in their training here at the school?

>> ANDREW PEKOSZ: One of the unique things about the school of public health, is -- um, Johns Hopkins school of public health is you know, we have, everything needed, I'll focus my response on infectious diseases to respond to an outbreak. My department is a basic research department. We have people who are working on Malaria Toxiplasama, Influenza, other pathogens we do it from a research standpoint we have other departments that translate that research into practical therapies and other departments that actually come up with the effective ways of delivering those therapies to the population.

So I think, a unique thing about the school here is that you can see, everything, um, our school model is from molecules to society. And, we really do cover all of those, experiences here.

And, if you come to the school here you have the opportunity to actually learn about all of those aspects how they interconnect that's a real strength of our program here.

>> Great thank you so much. Um, also, you talked a little bit about the simulation last summer would you be able to talk about how that would work and students get involved in this type of work through the research centers?

>> ANDREW PEKOSZ: This is from the center of the health security that Tom Englesby you can find his web site really easily the exercise run in the summer basically was, um, started with a potential spread of a new virus in in a population in a particular country and then, there were four scenarios afterwards one that occurred two weeks later and two that occurred two months later and six months later. And the perimeters what was happening then changed in between that. Um, but what Tom and his group were able to do is bring together a whole group of world leaders and public health poll licks leaders to sit around the table and essential role play how certain agencies respond and how governments will respond and certain businesses respond if they were told -- your supply chains are cut?

And so the -- it was a fantastic exercise in terms of having people say, what would happen, what would not happen, where the weak points in the response would be. The great thing about this is, it was open to the public so, everyone could come and participate as a, um, in the audience and watch this happen in realtime.
It was web cast as well.
Um, and Tom's center for health excellence for health security always engages, students in some of their efforts because they really are interested in hearing people's responses, people's opinions on these things so he has a whole outreach effort that involves the students here, and -- getting them involved in some of their health security efforts.

>> Great. Thank you so much.
That's really helpful to know. Um, okay.
So, thinking a little bit about some of the work that you're doing.
How does a decision go into making when you're starting to see a trend in trying to figure out if something really is becoming a pandemic? How does, how does one become from effecting population to becoming a world wide pandemic?

>> Yeah. Great question. Um, and it is a very difficult thing for us to really be able to be able to predict outside of the initial outbreak. You'll use the COVID-19 as a great example. A virus can cause the common cold in humans they circulate every year. Most of us don't even know it. There have been Corona virus like SARs and MURS in the population, emerged never really took hold been able to spread effectively in the population.
And, now there's COVID-19, which appears to have been able to take hold of in the population and spread extensively.
And one of the things that my lab likes to do is identify those factors that are present in these viruses, what is different about them? What makes one more able to spread and other less able to spread?
And while we can't work on every virus my lab does focus on the viruses have completed that jump like COVID-19.
Because those are the viruses that we, that we know have a acquired some of these unique abilities to move from an animal into a human and stay in humans. And then we use all of our molecular techniques to try to, figure out, what it was that, happened at the virus and that allows us to -- that allowed it to become such an important pathogen in humans.

>> Thank you so much, one thing we would like to let our audience know is that, if you do have any questions, for Dr. Pekosz you can use the chat function if you don't see it you can refresh you can be see it there, we'll ask him the question directly if you want to ask it.

>> So I have one other question for you Dr. Pekosz how have you guys been involving other departments here at the school to get the word out? Are you talking with our health communications folks? And how are you been working with all of the different departments here just at the Bloomberg School?

>> Yes. This really has been, um an across the board effort.
Um, as I mentioned in some of the things I talked about here, we work really closely with the center for health security and the environmental health sciences department.
In terms of those efforts, Justin and I talk on a frequent basis about the epidemiology and infectious diseases our communications department, at the school of public health, is wonderful engaging in terms of -- the they understand all the different expertise that we have at the school.
And, when questions come in, they're great at finding the right person to answer the right questions so that, I don't get an epidemiology question they know that, Justin should get the epidemiology question they also know if someone asks about the question about the mutation, that Justin shouldn't get that I should get that. The school's communication group, has really been fantastic about getting the questions to the right people -- so that you not only get the right answer but coming from someone, who has the appropriate expertise, and presumably then that answer carries with it more weight.

>> Great. Thank you.

>> You guys can type in your questions, so you just need to refresh your screen if you cannot see the chat function we'll communicate your questions they are private, so no one else can see your questions if you're afraid to ask. So these are all, admitted students, trying to decide whether or not to come here
or other schools you can you talk about, when new students arrive here, how can they hit the ground running and just, immediately get involved with the research going on here at the school?

>> Yeah.

>> It's COVID-19 related or anything else?

>> Yeah. Absolutely, the -- school is great, about scheduling activities during that orientation week that allow students to, um, get exposure to whatever departments and programs that they want to.

I no that our molecular microbiology department has their own -- um, lunches and student meetings that go on during that week. They're scheduled to try to not overlap too much with other ones. But those opportunities are always there.

I know that in the past I've gotten, I've been afforded around opportunity by the Dean to actually speak at the interview, at the orientation sessions to give the basic research perspective of some of the work that is going on here. And I know that the Deans, have always been supportive of trying to make sure they show a diverse, cross section of, work that is going on here.

Um, to our new students that orientation week is a really important week that you can get a great snapshot of all different thing that are going on across the school and hopefully focus some of your interest efforts, and things particularly resonate with you.

>> Great. So we have our first question from the audience. How would someone studying environmental health be an asset to the Coronavirus and implementation?

>> Great question, the viruses like COVID-19 are spread through Dropletfoamlite, which is when you have a droplet dropping on surface you can pick it up and bring to your space. That's environmental sign, droplets, how droplets move in a room they they settle how long they stay on surfaces all that stuff is the expertise of areas that are under environmental health and sciences. So that's a critical thing that we need to understand because we want to know for instance, how long is a droplet, infectious, how long does a droplet stay in the air?

Um, how likely is it if you get exposed to droplets that you're going to actually get infected? So, environmental health sciences studies are intricate in that area, my lab has collaborated with 3 or 4 faculty members environmental health sciences and I have a joint appointment in environmental health, and engineering because of that close relationship that microbiology has had with environmental sciences.

>> Wonderful thank you we just got two questions that came in that are -- almost the exact same I think, very important so, are there efforts being taken to screen misinformation? At Johns Hopkins surrounding COVID-19 in mainstream media and if so, any measures taking to combat misinformation?

>> The answer is resounding Yes.

You'll see, Hopkins experts out there giving you facts if you look deeper if you look at, Facebook if you look at other social media outlets, you will see Hopkins and other investigators out there, trying to dampen down and cut off chains of misinformation.

And what is important often times is that, it is not done in the dismissive manner done in a manner that shows you the facts the evidence-based observations, that counter these kind of misinformation things. Um, speaking personally there have been a couple of reports out there, about particularly virulent strains of COVID-19 based upon sequence analysis those have been tapped out relatively quickly, several manuscripts have been removed or retracted because of the social media out pouring of criticisms in terms of incorrect conclusions.

So, I think there's a lot of people out there trying to do the grunt work finding these problems and addressing them, via the social media outlets.

Um, and again, providing science and evidence based reasons for why those things are wrong not simply being dismissive of things.

>> Thank you.

Does JHPHS have any ties or opportunities to work with the United States Army medical research
institute in infectious diseases.

>> So there are a lot of opportunities to collaborate with the government agencies. Not just because of common interests, but I think, the relatively close location between a lot of these things and the DC area versus the Baltimore area does facilitate collaborations a these groups. We've gotten, personally we've gotten, Influenza virus samples from U.S. Army surveillance networks, um, that have wanted us to look at their samples more carefully we collaborate with a number of agencies at the National Institutes of Health and in the Food and Drug Administration in DC we've served on panels back and forth with them. A lot of scientific and clinical commonality between those institutions and Johns Hopkins I think the relatively close proximity, also facilitating working together.

>> Great. So we have a couple of questions that are surrounding the quarantines whether or not to close schools. Um, we have one question, I'm a U.K. trained doctor living in the U.S. the school is in my city are closed and businesses working from home. And the U.K. schools are continuing in your opinion, should U.K. schools close and another person is asking, um, are there other public health policies that need more research and study for example closing public schools.

>> Yeah. So, my answer is that these decisions need to be made at the local level so right now we're at a stage this virus is introduced into populations it is spread in small communities and -- these decisions have to be made by those public health officials on the ground dealing with it. It is very difficult to say what is going on in Baltimore should or should not be going on in London because the -- the details of the outbreak there, versus here, are different.

It maybe that eventually the same things we put into place, but at the point in time, public health officials make these decisions based upon the local events we shouldn't doing too much extrapolation, what they're doing and what we're being asked of the public officials in this particular area, at this point in time, Maryland is off a new set of guidance for this, everyone in Maryland should be looking at their local public health agencies, finding that guidance and, working outweighs that they can change their behaviors, to sort the guidance being given to help us mitigate the pandemic.

>> Great. So there's another question um, kind of a follow-up, British epidemiologist have expressed the important importance of timing are you concerned that school closure, I'm sorry -- at this time will have a negative implication.

>> The public's ability to tolerate these efforts is always an important thing to consider. You know I think in Maryland, the timing of some of the school closings, um, is consistent with the early stages of the infection.

Closing schools, once there's 100s of cases in the schools, is probably going to be less effective than closing them beforehand.

But as always, there are implications, of closing schools, and that ripple out from that. Um, parents who are now seeking child care or, perhaps having to stay home, to take care of their kids because they won't be going to school. All those things have to be factored into the decisions as they're made.

So, in Maryland, the decision was made that we're early stage of the outbreak and, that these types of interventions, um, now have the most likely chance of succeeding. It correlates a little bit with our, with most of the schools being on spring break. So, two week break right now, perhaps is a little bit less of an impact on people because of that spring break.

Um, but, um, it really is like I said, it is -- it's just something that, we determine at the local level needs to be done to try to stem this outbreak as early as possible.

>> Great we have a question about how feasible is it, we'll see if you can answer this, for MPH student toss get involved with research like the COVID-19 research with the program being only 11 months I guess we can kind of expand that, do you work in that, the students from all different degree programs?

>> Yes we do and, in fact, um, I've been involved in at least, um, four MPH students who have been involved in Influenza research and one level or another. Some have been involved, directly in the laboratory.
Others have been involved, in terms of some of our analysis of data. That we collect from our annual Influenza surveillance work so -- it is a resounding Yes, I think the, if you use the MPH as an example you know the practicum is a great way to get experience working with groups such as mine because, um, we have lots of data, we have lots of collection that has to get done and, um, we're always looking for students that can help us, sort through the data analyze things in different ways. So, um, even over the course of 11 months, um, there are opportunities that you can take, to get more involved in research efforts you know here at the school.

>> Okay. Thank you.

Um, there's a question about what do you think the likelihood of -- sorry health policies are often reactionary take a long time to come into fruition do you think there will be changes in U.S. or global health policies after COVID-19 dies down?

>> That's a bit of a loaded question.

>> I know (laughter)

>> You know I think -- you know, we always deal with these types of, reactionary measures and then it does seem that when we get down the pathway a little bit, people forget about the impact of a epidemic and sort of asks why are we doing this, when they don't see the eminent threat. Um, I would really like to think, that, this is going to be a real sort of, tipping point in our, in our dealing with infectious diseases you know the likely source of this, was, um an animal in a live market, um, in southeast China. That has been a problem, for multiple years now has been the source of, SARs and AV Influenza viruses and other infectious diseases I like to think this is a tipping point to allow us to change ways the way viruses gain access to the human population it's a constant struggle.

Um, I think if you ask many people now to think about the 2009 Influenza pandemic they have a hard time realizing what a burden that was, but I can tell you from being in the middle of it, that, there was um, that there was you know, public out cry, similar level in terms of wanting information and how to deal with that.

So, we do have a tendency to forget and not want to respond given time. But I'm hoping this one is going to change that because of the large impact that is having in the human population right now.

>> Thank you great. Thank you. Okay. Another question is, what is the most important piece of information that we as public health students can share with those outside of public health highly panicked about the pandemic.

>> Well you know the simple thing is, is to not panic.

Um, there are guidelines out there. There are guidelines, in terms of the social distancing cough etiquette that are, um, I won't say easy to follow, because -- some of them take a little bit of time. To break habits and break behaviors there are guidelines out there and, if you can focus on doing those productive things we know can make an impact on the outbreak you're much better off than trying to speculate about, for instance, does the Coronavirus, is it infectious on the surveys for 2 or 3 days I don't know the answer to that, it's a simple answer is, if it is 2-3 days doesn't matter if you wipe down that surface with a light bleach cloth kill the virus right away it's trying to focus on those interventions that are practical, that are things people can do on a daily basis do those things on a level, that will be a very useful thing for people to focus on.

>> Thank you.

What is kind of leadership is needed on a local level for this type of situation?

>> So your public health officials are on the ground, they have providing the right advice, and they have to be moving that advice based upon the number of cases that are occurring in an area.

And so, um, I've always emphasized this, everybody should -- um, find you know the CDC and the WHO have great general guidelines how to deal with a pandemic but everyone should go to their city department of public health or county department of public health, state department of public health find the web pages, finds the hot lines and utilize that guidance, um, to make changes in the day in and day out behavior again the local responses is what are important here. Um how you behave is going to
be dictate by the number of cases in your area how the virus is spreading the closer you are in contact
with your public health officials the better off you'll be in terms of being able to respond to it
appropriately.

>> Okay. All right. And we have time for a couple more questions. Before we move onto our next
presenter so -- um, you did address this, someone is asking, CM students have a similar opportunities
for applied work or more geared towards MPH,

>> I did focus on the MPH students before, but -- I can tell you that, in my laboratory right now, um, I
have an MHS student doing laboratory work I have two SEM students and, um, a number of PHD
students as well I think two a Tee, participation in the laboratories is certainly something that can
happen, irrespective of the degree program you're in I also have, two MHS students who are I'm
working on their thesis with them, there are opportunities with that, to interact with faculty and you
know that can help modify your thesis in away that allows to bring in different expertise than maybe
you thought you needed -- at the beginning of the writing.

Personally I know I can speak from my colleagues, all of us interact with students, irrespective of their
degree that they're here.

Welcome those interactions.

>> Okay. Thank you. Question about some of the academics here wanted to know, if you have any
recommendations on courses that would be helpful learning about this type of work? So any
suggestions for the admitted students on what they should pursue here?

>> So we just finished up a course that I teach with my colleagues, called pandemics of the 20th
Century. So I think that's a great place to start.

(laughter) in fact just a little story we had our last pandemics class on Wednesday and, on Tuesday,
Johns Hopkins sent out the -- the message saying that, in person classes were canceled we had to
switch everything over to online. So, our students quickly, garnered their resources we set up the zoom
we had our conference.

Via web cast, which was a very interactive one, again we summarized with with the work going out
with the previous outbreak SARS, with 1918 Influenza and a number of other outbreaks and then,
about halfway through our class, WHO came down with the official announcement it was a pandemic
now we ended our last class, with the start of a new pandemic, that we had not talked about in that
class.

And so, it was a bit surreal it will probably register with those students for the rest of their lives that's a
great example, that's a class where we try to bring together basic scientists, epidemiologist and
clinicians we look at these pandemics through the different lenses so the students, can have a -- holistic
understanding how all of these disciplines contribute to our ability to control an outbreak.

>> Okay.

>> Little self serving.

>> We have a large group next year in that class. Wonderful.

I think we'll do one more question.

>> Sure.

>> So, we don't want to leave out our MSPH folks -- so, um, we have 3 or 4 have just come in, just
kind of saying well, do they have as many opportunities profession professionally, and a lot of the
students to get research opportunities.

>> A lot of opportunities selfishly I have a daughter applying to the MHSP program I can tell you she
has been doing research in undergraduate the appeal of the program was the fact she could continue to
do research in a wide number of places. So, -- absolutely I think that's a fantastic another fantastic
program that allow you to get another unique skill set to contribute to basic research or applied research
if you want at the school of public health.

>> Okay. Thank you so much. So we are now going to transition -- thank you very much.
>> All right thank you all very much.
>> Okay.
>> Okay, before we bring up our next presenter we'll show a video, um, that will -- um, kind of give you a look into life, life in Baltimore.
(captioned video)

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>> (captioned video)

All right, up next before we get to our next presenter refresh your presentation couple more times we have turned off the chat function during Mindi's talk we'll be putting it back on for the panel that will be staring in just a little bit.

So, up next I would like to introduce Mindi Levin the founder director of SOURCE it's my pleasure to be here with you too talk about the SOURCE engagement learning center for the health professional schools as well as life in Baltimore let's get right into it. So SOURCE is the community engagement and service learning center we've been supporting the 3 Johns Hopkins university health professional schools, for about 15 years, now, so we're celebrating our 15th year, throughout 2020.

We are actually located within the school of public health, here in the Wolfe street building a lot of the information I'll share with you today is information you can find on our web site.

So, encourage you to take a look at that as well.

So our mission through source is to basically engage our 3 Hopkins professional schools Baltimore communities in partnerships is that promote health and social justice. And through the work that we do with our mission we are also adhering to our core values, I wanted to share those with you today.

We focus on reciprocity. Making sure that the exchanges we have between our health professional schools in Baltimore communities are mutually beneficial to everybody involved.

We also focus on justice, service, and collaborating. All of the work we do, through source is in collaboration with our students, faculty, staff as well as community partners and alumni throughout the world.

The main thing that I would like to drive home to you all is that, our focus and source is on really encouraging our school of public health students to collaborate with the non-profit organizations throughout the city of Baltimore you'll hear me talk about Baltimore a bit more, because our center is specifically focusing on Baltimore city.

Now some of you might not be coming to have your programs here in person in Baltimore, but we still show up in online spaces, through some of our online service learning courses so a lot of this information will still be relevant to you, if you're really interested in partnering with the communities and focusing on social justice issue.

Why do we really focus on having our students as well as our faculty and staff, collaborating with community based organizations here in Baltimore?

Well for one there's a lot of the courses that you'll take, that are focusing on teaching you the theory, we give you the opportunity to apply that theory in a real world setting through these public health practice applications.

I can also tell you there's this rich history of our local non-profits, partnering with Hopkins schools every year when new students are starting our non-profit partners are asking us when the new students
coming we're ready to get them on board into our work. This is a fantastic way for you to also have opportunities for career development, building your resume and CV, networking with others and we work closely with our career services office here as well. For those of you that will be joining us here in Baltimore, this is a fantastic opportunity for you to really get to know the community and build relationships here on the ground. Now, Baltimore is not unlike other cities throughout the United States. And, um, we have health challenges here but with those health challenges I can say that we have tremendous assets in our communities. That are working together, with our schools to make a difference around these health challenges. So, some of the things that we're focusing on throughout the city of course, high risk of diabetes, hypertension, obesity, we hear a lot about substance abuse issues and the opioid epidemic occurring that's something we're focusing here in Baltimore city as well. The information I'm sharing with you about the last Census helping me to give you a plug for those in the United States to -- complete this Census for 2020 as well, but ten years ago when they were completing the last Census, 15 percent of Americans were living below, that federal poverty line, and if I would show you, the communities surrounding our health professional schools, that statistic was even more staggering when you saw that almost 30 percent ever the east Baltimore residents were living below that federal poverty line as you can see there are needs in our community we're focusing on the assets that are involved with helping to make a difference in true collaboration. How do we do that? I can tell you that, source partners with over 100 non-profit organizations, throughout Baltimore city. Obviously I don't have time to tell you about all these fantastic partners do I want to highlight to you you can take a look on our web site and see, our full list of current non-profit partners they are, organized, by a wide variety of categories, so, whether there is a particular health topic that you're really interested in working on, or, if there's specific populations that you really want to be, collaborating with -- we likely have a non-profit partner, within that network of over 100 organizations that are working here in Baltimore. So I encourage you to take a look at our online directory if you want to learn more about the partner that's we already have. Okay. I always kind of explain to folks that, source is your one-stop-shop for community engagement and the involvement opportunities that we have for our students faculty and staff are quite wide ranging we like to focus on what your availability, what your interests are, as well as where you're living to help kind of be your match maker to community engagement opportunities. We'll do everything from, one time opportunities, to thing that are short term, all the way to long term engagement that is a year or multiyear opportunities. So some of the opportunities that we have, are directly linked to your academic and apart of degree programs and cap stones and practicums and field placements other times people say I want to have a break from bio stats I want to tutor a child. So we have all sorts of opportunities that we can help meet your needs. So, from volunteer positions, internship federal work study internships we show up for credit public health practice opportunities as well, it will give you a whole gamete of getting involved in the community that could be meeting your needs. Of course I mentioned earlier that we focus on social justice we do a lot of trainings for our students faculty staff as well as community partners around social justice competencies and making a change in our communities and with our communities. So I mentioned we're the community engagement and service learning center some of you may not know what this concept of service learning is, it is a pedagogy we're utilizing in a whole host of academic courses as well curricular through source, you're having a structured experience working out in the field projects developed by our community partners students involved in service learning understanding the context of the service that they're providing and we make the connection, between your academics, directly to what you're learning at your community sites. So it is a fantastic learning opportunity that has rave reviews from students faculty and our community partners alike.
To give you just an idea of a few of those service learning courses I wanted to share a few examples with you, so Source offers what we call our Baltimore community practicum course. It's a multi-term course in second and third terms and this is our flagship course; the first service learning course we offered at the school, now that list has grown, I don't have enough time to share all of those opportunities, so you can take a look at the various opportunities including, we have a formulating policy course, which is focusing on how we're developing policies with different organizations and agencies. We have a course focused on children and crisis that gives you the opportunity to be working in the field, with agencies that are focusing on children as well as some schools and other organizations.

We have courses that will actually teach you specific skill sets, that you have a real world application. So, some of those could include the program monitoring and evaluation course which is a fourth term course. It's about to kick off online. And this is an opportunity for students to help organization and partner together, to develop evaluation tools and program monitoring and evaluation tools.

We also have courses that focus on program planning for health behavior change. We're making logic models developing programs, as well as doing all sorts of evaluations. One of the very popular courses is a qualitative research course series that extends throughout second, third, and fourth terms. In this course, students are taught qualitative research methods but then you're actually working with local agencies on these projects. So you're working with them to identify their qualitative research questions, and then students are conducting focus groups of key formed interviews as well as other observations not only are you developing your skills but having this educational experience but you are also simultaneously working with organizations and support needs that they have identified. So, it is a really win/win opportunity.

Another one of our fantastic programs is our connection community consultants program. The connection is a program that allows small groups of students not just students from all degree students in public health and also from medicine and nursing, very interprofessional program to work in small teams, on short term projects. The small teams are usually about 3-5 students per team, to working on projects that run about six to 8 weeks long. We offer 3 rounds of connection projects in an academic year. We will host a fall round a winter round as well as a spring round again; these are great opportunities to develop skills. Some of you already have some of these skills, such as grant writing or program evaluation. Others of you might want to develop these skills it's great to work collectively with a small team to together, with an organization, to complete some of these fantastic deliverables. And over the years we have completed close to 120 different connection projects in partnership with organizations. So this is a great way for you, to develop your skills and get involved.

I do want to offer you a few other Source opportunities, that we host, again, some of these are related to your academics and some of these are curriculum. This is a very popular program the HIV counseling testing this is one of the programs you need to be here in Baltimore city to participate in. That's because each year, we train about 40 students from across the 3 schools to be certified in the state of Maryland, to do HIV counseling and testing.

Once you are accepted into the program, you are also going to be placed at one of our four participating community clinics, to complete HIV counseling and testing. Basically students are asked to complete a minimum of two shifts per month, some sites ask for one shift per week. And this is something that we will have our applications open up in late August, and be due some time in September be on the lookout if you're interested in participating in our HIV counseling and testing program. We also have another program that is called our Source service scholars program we typically select five students from public health five from nursing and five from medicine to participate in this particular program. Students actually apply to support a community identified project that has already been identified. And, they go through a yearlong training program, they have our source service academy sessions they go through in the evenings and online trainings, and then they become the student leader at an...
organization to complete some projects. There's a small stipend part of the source service scholars program we'll have a second round of applications become available this summer. So be on the look out for that. Also like to share with you, that we have a special program, that is moving into ninth year here at the school it's the source service learning faculty and community fellows program. And why is that important for you to know about training program that we have that is only available for our faculty and community leaders?

Well, this is our opportunity to train folks, in service learning pedagogy which basically means we're introducing more and more for credit public health practice courses at the school. And this is a great way for you to develop those skills, while meeting community identified needs as I mentioned earlier some of these courses are moving to that online platform, so gives you a great opportunity to develop skills even if you might be working in an online space.

We also have a special program, that is in partnership with the Bloomberg American health initiative this is our Baltimore action projects again each year we will put out a call for proposals to our local non-profits, to -- identify project needs that they have, that could focus on the five critical public health issues have been identified, by the initiative.

This gives students an opportunity to apply to certain projects, that are working on the ground here in Baltimore. These are, paid internships and we will have opportunities for you to apply to participate as a Baltimore action project scholar coming soon, later a little bit in the summer. The last thing I want to mention we also have a whole host of online modules that are available through source. And these modules are basically meant to help prepare folks are going to be doing work in community.

Doesn't have to be in Baltimore, we have opportunities for you to learn about how you might partner with organizations, and populations ethical way, often time our students will be required to take those courses. Finally one of those online modules is the history module that talks about the history between Johns hop kin and the east Baltimore community surrounding the campus it giving the historical relationship both the good and bad and challenges that have come and are still here how do we work together, it really gets people off on the same foot to understand, that historical context.

Source hosts a whole bunch of other activities I'll touch upon those, in September we host or annual source community involvement there, this is when we invite all of our non-profit partners to campus have a big fair and our faculty and staff and students are invited to come to meet us in person, you can learn about the organizations really connect directly with people, that are here in Baltimore.

In October, we host our annual Baltimore week. So many of you we recognize are not from Baltimore I'm actually a native Baltimorean I'm very proud of our city to share and highlight those opportunities, but some people will come to Baltimore not know anything, so, we want to highlight, the fantastic things that are happening in the cities those the thing that are focused on that, might be hard and -- challenging at the moment, and how are we bringing our faculty our staff and our students, to be apart of answering those questions here in Baltimore?

We do tours of the Baltimore community we recognize so many of you are, that might be coming to campus, might not know anything, so we show you around the city we talk about the history, we show you where these organizations are located and talk about the various health topics we're working on. And, of course, we have special week long activities. Each April, we host our national volunteer week. This is when we recognize, appreciate as well as give out awards to folks have been involved in the service learning and community engagement activities. And we also have a number of, what we call, our practicing justice sessions and these are -- social justice workshops, that are training folks in the various social justice skills we give you that opportunity to apply those skills out in the real world.

And, of course, we do a ton of collaborating with various student groups a lot of our student groups on campus not just public health nursing medicine as well as some student groups that say we're a tri-school organizations they will focus on doing service in the field as well as being educated, by our community partners who we very much look at as, co-educators in this environment. So we really are partnering with folks to bring in various voices, because who knows our communities better than the
people that are actually of and from the community.

And lastly, I want to give one final plug about source, and that is that we are here to support your learning. And we're doing this in a number of ways this is not just a classroom setting. Again as I've mentioned a few times going to be out in the real world doing public health practice and developing fantastic relationships not only with the community organizations and your faculty but also with the students that are going through similar experiences.

So, this is a true opportunity, for hands on learning and, advancing public health practice.

If you are really interested in staying connected to source, I will encourage you to, think about a few thing -- um, for one, as I mentioned, you can get all of the information, from our web site, so feel free to take a look and look at the web site look at our various opportunities and program and partners but as many of you likely are, we're also all over social media you can always find us at JHU source we're on Facebook, Twitter, we have a YouTube Channel, and Instagram as well as linked in, I'll encourage you to take a look I'm going slightly change, my direction here, and specifically, start to talk about living in Baltimore again for many of you that may be coming to campus this is a great way for you to learn what might be your new city I recognize some of you might also be Baltimoreian like myself when we talk about Baltimore, one of things I want to start off by saying is that -- in just next month, is going to be five years since the up rising happened in Baltimore following the death of Freddie Grey we talk about this as well as move to action about in the setting Johns Hopkins was a critical part of the conversations as well as the actions took place following that up rising. Some folks out there, might think about Baltimore in the only thing that you might hear about what you saw through the media. Hearing people talk about riots and unrest in the city. Those things certainly occurred but what you were not seeing, were the months and months and years and years of peaceful protesting and community working and collaborating together so many of us here in Baltimore, were disappointed you did not get that full picture about what was happening on the ground and those things are still continuing here throughout our city, with our other academic institutions, non-profits as well as businesses and local community working together.

So, I invite you to be apart of Baltimore as well as helping us to change the narrative around our city truly is a fantastic place to be I mentioned I'm born and raised here in Baltimore there's a lot that we are proud of and this is an opportunity for you to join in that collective action to bring about social justice and change and continue to promote public health.

The things I'm going to be sharing with you today, about Baltimore, I'm going to read through are going to be focusing on, some of our unique dialect I'm going to identify, a few famous people, there are many more, we'll talk a little bit about those transportation option you might have, to get around the city and campus as well as entertainment restaurants where are you going to live and so much more. And then after I wrap up, my comments, is when we're going to have, a panel of a few of our current students that all live in different neighborhoods throughout Baltimore they're going to be able to answer the questions that you have, at that point in time.

Okay. So, let me start with the dialect as I mentioned we might want to have you, brush up on your bawlmere. Is e, when you hear some people, in Baltimore talk there are some things that you might not have heard before.

In terms of our speech. So some folks might call this bawlmere have the little draw, instead of Baltimore Maryland. Um, so, that's something that you could, often hear.

You also this time of the year the weather is starting to change get a little nicer it's actually beautiful 70 degrees in Baltimore city today, in the summertime we are all starting to talk about our vacations plan and, people around here, will say, you going down downey owe Shin we're talking about Ocean City Maryland 2.5 hour drive from Baltimore city, very popular destination attraction.

Other wards you will notice we draw words out or add an extra letter.

Just happens it is our dialect. You might here talk about Arning their clothing which means ironing the cloths to get the wrinkles out or Warshing their clothing adding the extra R. And -- we have already the
that major league baseball is going to delay opening day. With COVID-19, but in Baltimore, we are a sports loving town you hear people talking about the beloved O's we mean the Baltimore Orioles which is our major league baseball team. Again, there are so many people, countless so again I know I'm leaving people, I just don't have enough time to rave about the amazing Baltimore residents born or raised here in our fine city. Whether it is, a number of, actors, as well as, authors, athletes, politicians, civil rights activists and leaders, many of those folks have come from our fair city. And there is a rich history in our community that you'll have an opportunity to really dive deep into and explore. And the other fun thing is when you're out and about around town often times you'll run into these people, such as John Waters always around time our retired senator Barbara McColsky is on faculty she is the longest running female Congress person we're quite proud to have her here she is a native Baltimore city.

Now, living in Baltimore -- Baltimore again we have some great infrastructure as well as some things that could be a little bit better from other countries as well as other cities around the United States. But there beautiful architecture and rich history, architectural digest 2 years ago now now, had a fantastic feature why Baltimore is one of the most exciting U.S. cities right now and talked about the architecture and all the thing are happening we have a very rich cultural art screen as well, fun things to check out.

Now getting around Baltimore again this is where we, do not have a major um, subway system we have some great things getting around town in Baltimore. One of the good thing to know is Johns Hopkins happens the state's largest employer most people in the area have to find a way to get to our campus and therefore a lot of the public transportation as well as our own Hopkins system is coming to the campus, much easier to get to the campus than other parts around town we have a very extensive and free Johns Hopkins shuttle system. Some of our students faculty and staff may live closer to the undergraduate campus which is about 2 miles north of our campus here in east Baltimore. So, folks get on that shuttle don't have to worry about driving and -- parking. And just come to campus here you may have heard about a new program that is going to be introduced this July the Blue Jay shuttle partnership with Lyft we're exited for that opportunity that will take folks point to point with a shared ride service within a 1.5-mile radius the center of the campus it really extends those opportunities for you to be commuting to campus in the evening time.

There's also a shuttle that runs from various parts of Hopkins we have a lot of different campuses in the particularly the greater Baltimore area, eastern campus there's a campus in Mt Washington and Baltimore is known of being a big college town there's a number of colleges and universities throughout this area in Baltimore city as well as the surrounding county there's a free Baltimore college town shuttle if you happen to be choosing to live near another college or university or want to go to take a class or go shopping in the another place often times you can hop on that free Baltimore college town shuttle another great opportunity to take advantage of.

Other ways to get around town, Baltimore does have a few other options, for public transportation, whether that is our metro and light rail system we also have, Marc trains, am track and our Penn station is here in Baltimore you can take trains around the area as well. We have a number of different bus lines and shuttle services, and including free shuttle services of course one of those shuttles comes here to Baltimore and Johns hop kin campus and then, of course we are easy to get through, throughout the area.

So if someone is flying into the BWI airport, they're able to get to campus through various publics transportsations we have water taxis and Zipcars ride shares, Lyft as well as many others so it's a great getting easier easier to get around town some of our students you'll find have cars as well as some that don't. Same thing with faculty and staff.

Now, for entertainment there's a lot to do in Baltimore there's a whole host of galleries, museums, theaters, et cetera so I won't be able to tell you all about each of them today, but if you're a person truly interested in getting around and exploring the arts, I'll encourage you to take a look at these various
galleries and museums picture on the slide, on the picture at the top, is the American visionary arts museum, very cool exhibit they host there, the picture on the bottom is the picture of the Lewis museum of American history and culture we have a Hopkins day free for all of our affiliates to go and check out the museum.

If you want to go see movies, live performances, am matures as well as the professionals there's a number of opportunities to check out here in Baltimore as well. I'll encourage folks to check out the creative alliance at the Patterson which is on the east side of town, very close to campus the picture on the bottom is a picture of the Hippodrome a lot of the shows from Broadway off Broadway come to Baltimore you can check out incredible shows and plays there.

I happen to be a huge foodie that's one of the great things I love about the city is there are countless different areas that you can check out. Whether you want you know, the fancy stuff, we've got, a whole number of chefs have won fantastic big incredible awards as well as we have, small coffee shops and food trucks throughout the city as well as a number of municipal markets you can check out, we have a municipal market just down the street from our campus called the northeast area it's filled with different stalls where you can check it out, healthy food as well as junk food you can buy socks there you can buy balloons there. You can buy pretty much anything you need at the market and again it is a wonderful mix of folks from Hopkins and people from the community all shopping and living close to one another.

Um, Baltimore we have to talk about our seafood one of the things we're known for if you come here and you are a person that does eat seafood we talk about, cracking some crabs and throwing back some Natty Boh eating crabs and drinking beer along with that. A lot of our students like to, go to various coffee shops and, hang out there, study, meet up, have some coffee and other things and, it is another thing that I think a lot of our students faculty and staff like to do, in terms of socializing with one another, while keeping up with their various studies.

As I mentioned before, when I said, the O's the Baltimore Orioles we're a sports loving town this is something different from larger cities where, you might not, happen to know if a sporting event is going on, when there's a big sporting event in particularly if it's a football, Sunday, this city is purple. Um, not to turn away some of the folks that you have your own a lathe answer to your own teams but it is a truly different vibe when you go to the grocery store and everybody is, decked out in their Ravens finest whether you're a person that wants to check out live sporting events or parenthesis there are a number of different thing you can check out in Baltimore. We have student and faculty staff teams, that are available in the community as well. So often times Hopkins S folks are taking advantage being on a kick ball team or doing thing of the nature, we have the Recs and parks around for people to get involved with it, as well as interesting sports as well that are a little bit unique. Such as, our -- roller girls and Derby fun events to check out. The other things I love about Baltimore is where we are. We are in close proximity to another, host of different states, cities, towns, where you can go out and explore.

So if you are in Baltimore, there's so much to do in our city, and I will encourage folks to go out and explore so you can get to understand the different neighborhoods and see the fantastic sites. But if you're a person that wants to head up to New York or Philadelphia, or head down to DC, or if you want to go camping and explore the great out doors -- you can do that.

One of our nicknames for the state of Maryland is Mini America and one of those reasons why, is because we have so many different environments to check out so you can go to the ocean, or to the mountains all within two hours of the city. So you can go out and explore all these different areas.

I'm not going to share about the housing resources I want to make sure our panelists are able to do that as well I know our fantastic admissions team is happy to share the housing resources we have the first place I encourage folks to take a look at is our Johns Hopkins medical institutions housing office. Because they're constantly promoting places to live, around town.

We also have faculty staff, students alumni living in the area that are, looking for roommates, or might
have housing available in their home, or they're renting out the apartments that they have.
So, these are great places to collect out, to find other folks in the area, that are already familiar with
Johns Hopkins and our campus.
You can also check out local newspapers, one of the agencies in town that I encourage you take a look
at is called live Baltimore. And if you go to their web site, which I provided to you here -- live
Baltimore.com you are able to read a little bit more about the neighborhoods throughout Baltimore city
one of the thing you'll hear constantly say is that, Baltimore is a city of neighborhoods different
neighborhoods might have different vibes different feelings, um, that are happening so if people are
really interested in particular activities I might recommend one neighborhood more than the other
because it is just kind of like what they're over in that particular community. So, if you want to read a
little bit more about all of the neighborhoods throughout the city, and encourage you to do so, of course
I mentioned the Baltimore colleague town network all of those colleges and universities throughout the
Baltimore and surrounding counties they have information on their web site about housing options
you'll find people that find their housing through Craigs list. The last thing I'll mention as I said before
-- that, Baltimore is truly a city of neighborhoods, a lot of neighborhoods tend to be popular among our
faculty staff and students to be those neighbors are somewhat encloses proximity of to our shuttle lines
or, just places that are a little bit more convenient to come to campus you don't need to drive to campus
pay for parking you can take public transportation or take advantage of our own free Hopkins shuttle
services live wherever and come to campus without having to have those other restrictions upon you
and those other expenses so -- some of those neighborhoods that you'll hear us talk about, often times
are because they are around public transportation or the hopki in. S free shuttle I recognize some of
you might be coming and living in Baltimore might need some other sports and resources so, if you
need to find a place to worship there are a number of different organizations here that can certainly
connect you and provide that information.
Some of you might be coming with families and need child care options we're glad to provide those
services and -- promotions for you as well and then, of course, in the city, trying to find other parks and
recreation like where is there green space where can you go out take a walk? Or walk your dog or
breathe some beautiful clean air we talk about our major parks around the area we want to make sure
you are, connected to all of the different aspects that would make you have, a very healthy and happy
experience while you're here.
So, with that -- I am going to, end my talk here we're going to take a pause and, as we get set up for our
panelists and at that time we're going to turn back on the option, for you to ask questions, of our
panelists so bear with us momentarily.
Yeah. Perfect.
>> Um, as I have a couple of announcements as Mindy gets ready for the panelists, so, you ask go
ahead and again sorry for this, but go ahead and refresh your screens one more time.
You will see the chat function pop up.
Go ahead and start asking any questions you might have, about living in Baltimore, transportation, and
anything like that.
The panelists are going to introduce themselves and we'll start, taking your questions.
Type in your question, they're private. We will not reveal your name or anything like that we'll get
through as many questions as we can, you can reach out to us later if any of your questions do not get
answered we can try to share of some of the contact information as well. So just bear with us we'll get
started in a second.
(pause in captioning)
(pause in captioning)

>> All right so our panelists are here and we are, really thrilled to tell you about living in Baltimore
we're going to spend a little bit of time introducing our students to you as well as the neighborhoods
where they live. And, then, the rest of this time is for you -- to ask those questions and we're going to take turns, answering questions. So what I'm going to do first is ask each of our panelists, to spend a few minutes to introduce themselves so they're going to share with you, their name, department and degree program as well as, the neighborhoods where they live, and they will share a little bit more about what they love about their neighborhoods. So, maybe we'll start with you

>> Sure.

>> Okay.

>> So hello everyone I'm Essa, I'm Essa I'm from the MPH program, international student from Singapore I came here for the program I'm doing the social behavioral concentration in MPH I live in Charles village where the Homewood campus is 20 minutes from the shuttle what I love about this -- is the campus is beautiful it's a great library a lot of study areas, um where I often work in and hang out. The place is also really green and scenic little bit different from what we have over here, a lot of coffee shops and grocery stores mostly what you need over there.

So, yeah.

>> Okay.

Hi name is Levina, MHS student in the biochemistry and molecular biology program here. Masters of applied science I left in mount Vernon I have for the past few year it's very central, a lot of transportation options, it is very close to a number of museums including the Walters I live currently near Penn station I just walk about five minutes to get to the shuttle and takes me about 15 minutes to get to work and school each day. Um, but it is also very lively a lot of restaurants places to go out at night and I'm a city girl at heart keeps me happy.

>> Before we go on I want to point out if we're able to see the screen okay I think so, I'm getting thumbs up from my tech assistants, um, on the screen, I wanted to share really quickly, um this is a, map of a portion of Baltimore city. And, this blue star that you see right here that's basically where we sit at Johns Hopkins.

And you'll see two red lines that I've added to this particular map. This first one, that is running north to south this is Charles street. Charles street is a main street throughout the city that basically connects our city from the east side of town to the west side of town. And then the other red line that you'll see on the screen that I'm moving my mouse over, um, this is Baltimore street and Baltimore street is what is -- which makes the city cut in half north side, from the south side.

So, Essa talked first and talked a little bit about, where Essa is living which is Charles village I'm circling that hi a little bit with the mouse and this is, going along a main area there is public transportation and buses and Hopkins shuttle service there. And we were talking about mount Vernon centrally located you can see how close it is, to the school of public health and our east Baltimore campus.

I wanted to give you a little bit of bearings there I'll let Chelsea go next

>> My name is Chelsea I'm a second year of student in board of epidemiology, I live in Fell's point which makes sense and -- I actually found the house when I emailed the administrative person in the department of epi, she had someone like express interest in finding tenants for their house I would definitely recommend you know, looking on the online housing web sites also reaching out to your departments seeing if anyone has reached out to the department, to see people want to rent this place I live in a cute row home, fells point is mostly row homes it is super close to grocery stores I walk to whole foods every way to buy my Kale or whatever and then there's a lot of other fun thing to do, if you're into like group exercise classes, um, by the Harbor it's all within walking distance is there anything else? Yeah.

I think we'll talk about this later but, we have a Lyft program that let's you, um, go within like a one mile radius of the school, after 5:00 p.m. and before 7 am.

So, most of my friends live in mount Vernon I visit them a lot I don't have a car so, definitely is
possible to get around Baltimore do all the fun things you want to do even if you don't have a car.

>> Great.

>> I'm Katie, 11 month MPH student I live in the middle east neighborhood which is -- um, just north of campus which is great.

Um, I came here to study public health I really wanted to live in the city, in with people that I'm doing public health with.

Also I did not want to have to, commute too much to school middle east was really perfect. So I can sleep in the extra ten minutes (laughter).

The thing that I really love about my neighborhood is my neighbors um, I can't say we hang out a lot we smile we just -- I don't know, feels kind of nice.

Um, yeah.

I guess, that's it, also rent is pretty cheap that's why I chose that neighborhood because I'm living on a shoe string budget I'm not going to whole foods or anything but Alzi is pretty close.

>> Before I start to take questions this question always comes up. So I'm going to ask if you all don't mind, jumping in with your responses. That is can you tell us a little bit more about, your housing situation? Such as, are you living in a row house? In a apartment? Are you sharing with roommates, or living in a home and approximately how much folks pay? Because people always ask that question. Anyone? Katie start come back this way

>> Yeah. So, I -- I originally was paying 500 one of my roommates, wanted the 500 room I'm paying 600 now I'm living in a row house.

>> Great. Thanks

>> Okay. I also live in a row house, I have two roommates we all have our own bathroom which was very important to me, because I think after college I could not go back to sharing a bathroom with anyone else.

Um, I currently pay about 740 a month.

Um, and -- utilities I think our utilities are a little higher than the other neighborhoods it's about 100 per month, including, like phone internet, water, um, BGE is the gas and electric, so about 850 every month.

And, I think most of other homes, in the upper Fells area to my knowledge are more expensive I don't know if that is -- I have not pulled out statistics out anywhere. But I think it is you know depends if you're able to find someone who is, who happens to be looking for tenants is willing to rent out their place for a cheaper price.

>> Great. Okay.

>> So I lived in two apartment settings since I lived here the first one was an apartment called Charles towers sort of by that weirdly shaped trapezoid in the downtown area I guess, that was studio apartment there was pretty expensive that was definitely a hit to my pocket that was like I would say about 1200, so I didn't stay there for very long.

But I ended up, um, I'm living with my fiance now we live in mount Vernon in a row home converted to an apartment, and -- it is very affordable for us because we're, sharing a bedroom but -- (laughter) so we end up about paying about, a thousand for a two bedroom currently and -- sometimes we will have someone stay in the other room

>> I live in a row house as well, so -- there's like I think 6 us in total I share the floor with only one other roommate which is quite nice we share a bathroom between both of us I pay about 400 a month for rent. Not including utilities which is about maybe 50 or $60 more I think the rent in Chelsea is 400 to 500 when I was look around it's a lit lower than what we have in around the campus maybe. So that's why I liked it as well.

>> Great. Thank you all so much for that sharing that information. When I'm going to do is read a few questions -- I'll go one at a time.

Not everybody has to answer every question, but please chime in the response to the questions have
come in from our audience the first question is how soon how I look for housing for the upcoming fall semester so think about when you were exploring when should they start looking?
>> Um, I would say, part of that depends on what you're looking for. If you're looking for an apartment you can start looking much further in advance like a few months in advance. If you're looking for a row home or if you want to share a apartment with a roommate or if you want to, um, you know rent with a, like a homeowner's, then, typically, they're not going to rent out that early. So you would have to look closer to about a month in advance. If that sounds about right? But yeah unfortunately they don't hold places for that long.
>> Yeah. I mean, it is totally based upon you. It is just like any other cross country move, so, yeah. Find some friends and -- do your best.
Yeah.
I was, I had full plans living many my car for a minute or two because I'm a late planner so I'm not ready at all.
But, like I texted the MPH group chat I'm like who has a place to live one of my classmates reached out I lucked out.
>> Yeah.
>> So I remember the distinctly I started looking on April 15th I don't know why I remember the date (laughter) so that was, that was like two months before I moved in which I think I thought was not enough time at the time because I never -- because before I had lived on campus undergrad that was in North Carolina I was making a pretty big move, um, so -- I actually, at the time, this is -- so irrelevant I had an ex boyfriend willing to drive me up to Baltimore to look at places if you don't have an ex boyfriend willing to drive you up to Baltimore that is a really helpful to see the houses in person, especially sometimes you look at the pictures online it doesn't really, you know, necessarily represent what the house actually looks like.
Being able to talk to some of the landlords to see what, you know, what they think of, living experience there and even just to see if this landlord is like a sketchy person or not, some of them definitely were you know, it -- it seemed like they were used to renting out to students almost on the verge of taking advantage of you know, your being naive if you live close enough to Baltimore are able to you know, make the commute up here I would definitely recommend, trying to look at some of the places, in person especially if you never lived independently before and that was my situation.
>> Okay. So I mean for me as international student it was a bit like, a lot of things to do on the list but for looking for houses I did it pretty early 3-4 months I started the program. And I thought this made it a lot easier when I came to Baltimore I had a place to move in, all this already set up so what I did I corrected can with alumni would having out it worked out, seamlessly we moved in, but disadvantage would be that you -- you could not review the house in person she took a video of all this, this something you can work around it, just to make it easier for you, as well.
>> Yeah. Definitely take advantage of the Hopkins network it helps you connect with other students, faculty and staff that are, looking for roommates or could be on ground already, or people that are going to be graduating and have spaces that will be available. Okay. Great. Another question that folks asked, what do you do for fun on the weekends?
>> Well, I'm currently on the Corona virus incident response team -- so, I'm in the hospital, all weekend every weekend.
So -- um, what do I actually do for fun though? Um, I found a lot of really fun like little bars and stuff in the area, and we go to the Crown to go dancing which is like it is kind of a like, I want to say sketchy it is not like a fancy place to go dancing if you want to get like more grungy clubbing it in the lyft zone, so -- yeah.
>> Um, and this, kind speaks of what Mindi said getting involved in the community I don't community involvement work with health care with the homeless it's a health care clinic near Fallsway I'm not sure
what neighborhood that is in, that is kind of like east, that's west of the school. Um, I did some surveying work I would, you know survey patients who are waiting on the -- like waiting lounge to see what would like to see, um, improved about the clinic if they liked their experience or felt like, you know doctors were listening to them and was, very different population, than the one you see around school, at school. And they were all, you know, um, socioeconomically disadvantaged I think learned a lot interacting with them. So I mean I think that's something that I did for fun last year. There are other thing too I think, you know definitely a lot of opportunities to get involved, in the community, whether that's on our weekends on the weekdays and all just depends on your schedule and, I guess other fun things I do go to whole foods by the way there's a discount if you're on Amazon prime the Kale is not that expensive (laughter)

>> Okay.

>> Good thing you're here.

>> Okay.

>> Yeah. Um, okay I've gone all over the place.

I will sometimes do volunteering I volunteer with seasons hospice palliative care, I was training with a Baltimore running festival they shut down the whole city for that you know, doing stuff like that, but -- also like we, go out to see plays we saw fun home last year which was awesome and -- go to like movies and, my fiance is a huge fan of craft beer we're checking out the out the breweries there's a lot of breweries they just opened up another in a converted church there's a lot to do, if you can consider what you're doing in your free time I'm a restless city personally never found I did not have something I -- I never felt like there was a hole only if they had this. So it is definitely like, there's so much things on I'll never get a chance when I leave which is a great feeling

>> I'm a nerd I love to hang out in the libraries in the local libraries local event you get to meet the authors connect with them that's how I got to know more about the Baltimore writers and things to do, - - to make sure, um -- the local events.

>> Okay.

>> Can I add something quick your classmates will be incredible you'll have so many great friends you're incredible if you're watching this -- so, like. Yeah. You're all going it find stuff to do. Like, yeah. And it will be great. Yeah

>> One of the other questions that was asked I know none you have are doing this, because you're living here in Baltimore, but, a question came in, about living in DC and commuting to campus, do you have folks that you know, that are doing that commute, potentially they are, living with someone else that has to commute to DC do folks have any experience with classmates or others doing that DC commute to Baltimore?

>> Do you?

>> Yeah. I have a -- I have one friend who is living in Columbia, halfway between here and DC, her boyfriend works for the state department, they have to live in the middle, it's like 25 minutes awhile, it's not a difficult commute, the first year of our program there's like 8:30 classes, every single day. Sometimes.

And, so it is, it makes it difficult to get here for the classes if you have to leave at 7 am in the morning by the time you're done the first class you're exhausted.

I also, have one professor I'm working with she lives in Bethesda, even closer to the DC. The Columbia.

And, um -- you know, she talks a lot about, commuting, issues and -- how, she has to like avoid traffic and takes you know an hour just to drive here. So I think, if possible, um, just based on what they have said I would recommend not living in DC or at least finding someplace in the middle like Columbia or I think it's Linthicum other places closer to BWI the airport.

So -- definitely I would say don't live in DC but find a place in the middle if possible.

>> Yeah. Um, I just wanted to throw in, so before I moved to Baltimore I actually lived in Silver
Spring, Maryland by the DC metro on the border of DC if you're familiar with the diamond shape and -
- that was like not even, dealing with the worst of DC traffic but it was pretty exhausting, because, I
would have to leave really early by the time I would get home it would be late in the evening I could
not stay like to hang out with people that I met her comfortably you'll be going, the good thing you're
going against traffic a lot of people that, work in DC live in Baltimore, and so, not going to be going
through worst of that, it is pretty tough getting in and out of the city on I-95, if you have to live to DC
like definitely possible, um, and Penn station if you're willing to -- pay the $16 a day they do have 8-
dollar tickets, to DC and Baltimore and back from union station.  Um, which is I think more feasible
for a weekend maybe than every day but -- um, yeah.
I would, I would agree though, if you could avoid it, I would definitely with, because the rent is going
to be way more expensive than it is here.
Um, so you're kind of reverse commuting that's what my sister called it.
>> So some folks I will share this, that, if you're already living in DC, we do have plenty of colleagues
do take the train in.
And, we also have folks that live in Philadelphia, and then commute to Baltimore through the train
every day.
And our train station Penn station we have a Hopkins bus that picks up there you can do it, you have to
plan for the timing all that kind of good stuff.
So, if you are in DC it doesn't mean you're required to, but if some of the students have mentioned, you
know there's sometimes there are things that early error late, so having that full experience is you know,
things that you need to consider.
Okay.  Another question that came in is one or two wants to answer -- um, people asked about where
they should live if they're really being athletic, running, yoga studios where are the best places to live
with the opportunities readily available?
>> You can go first.
>> So, there are gyms basically everywhere, so that's good, if you're looking for out door running, I
would say, living by like the, the under grad campus is really good, because they have got a running
track that look goes all the way around the campus very pretty in warm weather um, you know, it is --
there's a lot of options for running.
If you're cool with city running I did that, so you know it's also definitely feasible I used to run down
Charles street around the Harbor that was cool you get to see the water it is kind of lively, um, but if
you want to walk like run into a more natural area up there by Patterson park is another really good out
door running area.
>> Yeah.  So I'm in the free I live in middle east really close to the Cooley center which is included in
the tuition, so if that's -- your jam middle east is great you ask run down to Inner Harbor it's a really
nice five mile run there, that loop is really wherever you want.
>> Great.  Okay.
>> So -- just going off what you said about the Cooley center group exercises classes that are pretty,
inexpensive I would say I would definitely I've taken advantage of that you know -- dark spinning
classes, you know instructors yelling at you I think that's great (laughter) yeah.  And in terms of classes
out outside of school, so -- harbor point which is in between, inner harbor and fell's point little itlay,
Pilates and two Yoga studios this is probably too much detail if you like in class pass they give you a
discount compared to what you can get, just going to the studios themselves.
I run around Patterson park a lot sometimes around inner harbor it gets annoying so many red lights
you have to stop every time.
I'm on a student Visa I don't want to Jay walk it could be dangerous there's a lot of options there even if
you don't live in the under gr ad campus doesn't appear there's more out -- if you go to closer to the
medical campus, Patterson park is a great option
>> Great the age old question do I need to have a car?
Car or not to car?
I think we could argue both sides of that, but -- what do folks have experiences with? Because
obviously some have cars plenty of classmates don't what are your thoughts?
>> So I have a car.
Um, I feel like I'm too old not to.
Which is not true but I'm just, that way.
Um, and I love having it, to be honest it is a pain I actually looked at my parking tickets I paid $200 in
parking tickets this year, watch where you park if you bring your car. But, like -- I have this old Junker
it's paid off it gets me around the city, it brings classmates to things and -- I love it.
>> Um, so I have a car too.
You definitely don't need one, but it depends on what you want to do, with your time here.
So, like if you are someone that wants to just stay in the city and spend time with your friends get into
like class or have like a local job like you definitely don't need car they have a light rail, public
transport, they have the free charm bus and -- like, also the free Hopkins shuttle I take every day, so --
within Baltimore, it is pretty darn good, as far as getting around.
If you however you wanted to go to Frederick, Maryland then something like that you would need a car
there's not any options like to get to sort of the middle Maryland that is not DC. Um, so that's what I
would probably say. Um, but -- like, just to get, there's am track I guess that only really goes like up to
New Jersey and then down to Virginia, but not, west.
>> Yes, I don't have a car, so I imagine to get most other places with the shuttle and public transport.
I think if you want to do grocery shopping you can make use of the blue Jay system or the Lyft to get
around, from our village we have a free bus to downtown which is the bus that is really helpful you if
you want to go to the Harbor around the areas it is free as well. So I imagine to get around without any
car
>> Yeah.
>> For some reason, um you need like a short term car rental, the school gives you I think, a discount
on zip car where you only need to pay $15, for a year, or half a year, is it -- right I think it is -- yeah.
(laughter)
Yeah.
>> I think it's $15 for the whole year and then, every time you rent a car, um, it is -- I think ten dollars
an hour so if you need to go to -- you know Ellicot city or Catonsville, there's a good shopping around
there and if you split with a couple of friends that's you know only a few dollars per person.
Um, so -- I've taken advantage of that, although I will say that driving through downtown is sometimes
a stressful experience (laughter).
>> Yeah questions are still coming in, we likely will not be able to answer them all right now as they're
written coming in I know admissions team is happy to respond to them I'll keep going until Taryn, two
more questions okay great. So one of the questions that came in, is -- what opportunities have you had,
to network or become friends with students, um, outside of the Bloomberg other Hopkins students or
other folks local communities what opportunities are for you to make friends network with friends
outside of Bloomberg?
>> (pause)
I guess I'll answer, um, I can't say I've made many friends outside of Bloomberg but we have like
happy hours and things here. Which is fun. And -- then, like you go to the crown you meet a bunch of
people, so -- um I don't know.
>> Yeah I mean there are ways to do it like I, did some open mic stand up comedy nights there's a
pretty cool community there. Um -- and, like there's a -- pretty solid like theater community here if
that's your thing. Art community like there's a -- a number of, as Mindi was mentioning the -- the,
creative alliance is that -- they have a whole sort of arts based studio they will do, be like the first stop
on first Friday which is happens in warm months on the first Fridays they will do a thing you get
stamped at every stop you get to, you can meet people have free wine and open up the galleries it is funny met people doing stuff like that I did have a slightly like, different experience that's why I was look around to see my fiance lived her I met all of his friends that kind of exploded from there. But -- um, I do think the amount of social events that are going to be available there's a happy here every Friday even if you don't drink they have non-alcohol Beverages a lot of people a tend that

>> The school has, um, or the graduate student organization has different events throughout the year. There's supposed to be a formal I think it was canceled because much the virus, they had event in the power plant insane collection of bars you Google it, is kind of crazy but they had event, at power plant in the beginning of the year, students, all graduate schools were invited. But if you want a more I guess independent way to meet people from other schools, um, dating apps is one way, one way to go.

Um, I mean I personally don't trust anyone who doesn't have a linked in profile look that up before you go out with anyone.

I met people from other, graduate schools or just like in Baltimore in general. Um, through, you know -- those apps I think it is sometimes good to kind of see a perspective that is outside of your own perspective here in public health because I think most people here have you know similar political views similar views towards like you know inequality and, you know, structural, racism a lot of thing when you go outside of the school you kind of realize people have different points of view and you kind of learn to communicate what you believe in, um, and the way that is not oh just because you know, so that's kind of like the -- the good side effect I've experienced from being on the dating apps

>> Yeah. And -- I'll also just add Baltimore is very much a culture if you like just strike up a conversation with a stranger no one will blink an eye. People will regularly just be like hey like what about this weather? Like, people they have never met, you know it is invite to go that kind of like south in that way. So -- yeah. You it is, if you did want to -- like, saw someone they want to be friends with, like you could -- basically approach them and then they would be okay with it. So -- yeah.

>> It's a good point, when people are walking around the street, if you're from other parts of the country, when you walk down the street someone is saying good morning, friends come here, from like New York why are people speaking to each other? You know, that's -- we have many, nicknames for Baltimore one of them is smaltimore and Charm City, you find people embracing each other, Taryn I'll break that do light lightening questions right.

>> Right.

>> Okay.

>> So, you all talked about having cars -- how much are you paying for parking? Where are you park?

>> Only the $200 in parking tickets I

>> Read the sign free parking certain times yeah

>> Yes. If you have a car, if you live in an apartment, it kind of is -- you know, bad word you have to pay to be like, generally you have to pay for a spot in a garage if you live in like a row home, or like luckily our apartment, qualified for this as a row home you'll pay $20 a year you can do like a -- there's a lot of neighborhood parking around um, and -- there's also neighborhoods where there's completely free parking you don't have to pay, eastern Charles village. Options

>> Parking on campus -- yeah.

>> Parking on campus as well there are a number of garages garages are meant for faculty and staff, if you need to drive, and park we do have, some satellite locations that are much more affordable for students. I'm looking at -- about $50 a month for those parking if you're doing that.

>> Okay. Um, another question to ask, are public health students able to use the undergrad campus resources like the library?

>> Yes. Can you go to the library.

>> What yes

>> What about the the rec center
We use the libraries and all the facilities and the school libraries.

And the blue Jay shuttle which is their Lyft system over here, we have are free to use that as well the night rides and the facilities.

I should say you can join the upper undergrad campus like you can pay it's not expensive. Um, but, it is just not included.

Yeah.

So they do have like a gorgeous huge gym.

You can pay for the gym at undergrad campus you have free access to Cooley we have a facility on the ninth floor of our building that is a smaller gym it is nice easily accessible the last thing I'll ask, is someone had asked about, biking around the city.

Yeah.

So, um I can just start to jump in and say more bike lanes and pedestrian lanes are being added to our infrastructure. Um, and we do have them around campus. We also have a very protected area, literally, in the the garage, attached to our building where people, can put their bikes away. So they're not even out on the street.

But depending upon the neighborhood some of those places are better for biking and others not. There are -- there's a big bike culture and bike more Baltimore here. So a lot of our faculty and staff and students participate in big events and bike nights getting around town it is not perfect, options better than others anyone else want to say anything about biking? I don't want to --

Yeah.

I didn't know I'm saying a lot.

That's okay.

Yeah. So just as a fun fact something called bike party that's like 100s of people will get on bikes and dress in costumes just like ride around the city at night I don't know why, but it is kind of cool.

Yeah.

City is trying harder to become more bike friendly I would say because it is in that transitional stage, if you're living like in mount Vernon it's not super great they will bike lanes people will park into them or like open their doors without looking it is kind of dangerous if you're, like -- many other neighbors pretty popular and, definitely feasible.

Okay. All right.

Okay. Well I want to thank you all so much for taking your time, to -- chat with everybody that is viewing, online.

So thank you for being panelists and chairing your experiences. Much appreciated.

Turn back to you Taryn

Thank you so much Mindi and panelists thank you for joining us today, um we know it was unfortunate that you weren't able to be here in person, but we’re so glad you got to see a glimpse life if he Bloomberg School we hope these sessions were helpful for those who were participating in your department and program virtual sessions the afternoon please, enjoy those. And you all should have links for those if you've happen to loose an email with those links they are on your personal sites so you can check those out be on the look out for upcoming virtual sessions hosted by us or the admissions office or your actual program and development we hope up a great weekend please let us know if you have any other questions. Thank you so much.

(session concluded)