And from a commonology and from a health care standpoint, we had no early warning systems. We had no means to alert our patients on that day to say don’t go outside and use your inhalers.

We were staring outside our windows just like everybody else, you know, it has to change.

And when parents ask us for guidance on what to do when these wildfires came, You know, and honestly, like, what can you prescribe to somebody when the air is?

Their breathing is hazardous. I mean, there’s no medicine for that. The idea that these wildfires would reach our skies was previously unthinkable, but now it’s just fact.

Right, so we need to accept that this may not be the last wildfires smog we see in Connecticut.

And we need to prepare for the next time because they’re most likely will be. You know, the rest of the summer was marked by intense heat, intense flooding, and unpredictable weather, including this past week or 2 weeks ago.

You know, and past reporters we were seeing endless heat waves in the American South, devastation in Maui in Greece and now Libya.

And these are not isolated events, but these are symptoms of a much larger health problem. So we as medical professionals are trusted voices regarding the health impacts of climate change.

And there’s solid research to back that up. We cannot be passively watching these events unfold on TV.

We need to fight for the health of our patients and our planet. We need to advocate so that we have, the progression of climate change.

You know, we hear about extreme heat, extreme weather, but we don’t what we don’t hear about is the extreme use and reliance on fossil fuels.

And you know, how can we continue to burn harmful fuels at the expense of convenience and profit?

So we as a medical community have to fight back. And this is not something new. We’ve done it in the past.

We fought against, we fought for the removal of lead and gasoline, which was commonplace until the late nineties.
We fought for the removal of lead from paint. And we also fought big tobacco at home accountable.

And frankly, it’s time to fight back again. We need to push education in the space, educating ourselves, educating our patients, and most importantly, our legislators.

We need to show that this is not a political agenda. This is a health crisis and it’s happening right before our eyes.

So just a quick plug. So for those of you who would like to join fellow health.

Health care professionals in our state, please consider joining the Connecticut Health Professionals for Climate Action.

We are the Connecticut branch of the Medical Society Consortium on Climate and Health, which is the national organization.

And we’re looking for more members to help push education, and we’re looking for more members to help push education advocacy, and we’re looking for more members to help push education advocacy, and action in the space.

So please stick around. Thank you.

Okay, so our next speaker is Alex Rekman, who’s the program administrator for the Yale Center on Climate Change and Health.

Hi everyone, I’m Alex. I’ve lived in California for my entire life. 2016 was the first year that I could no longer ignore the profound impact that climate change had on my community.

The Soberian Aspire in Monterey County, a wildfire that burned 132,000 acres from July to October covered by car and ash every morning and had me waking up to a sky so gray that sometimes we couldn’t see the sunlight for days.

Life keeps moving even in the face of these disasters. While driving through Selenous Valley, I watched dozens of farm workers continue to work outdoors and the most hazardous air quality conditions.

The county had ever experienced in order to feed the country. In 2018 the deadliest and most destructive wildfire season California has ever seen.

I watched as the county fire in Napa. Forced my loved ones to pack up their belongings and only choose the most important items I could carry and evacuate their homes, not knowing if it would be standing when they were turned.
This is a climate emergency and it needs to be declared as such. It’s 223 and we’re seeing history repeat itself over and over and again in Maui in Canada and in so many other parts around the world.

Every week it feels like you turn on the news and there’s a new climate disaster like the floods that have killed hundreds of thousands of people in Libya.

The science is clear. Of fossil fuels has increased the magnitude of wildfires, hurricanes, floods, and extreme heat, some of which we’re seeing our own backyards.

The impacts of climate change are deeply affecting the physical and mental health of those living in time-up hot spots around the world.

Including heat related illnesses, vector-borne diseases, food and water insecurity, and population displacement.

And black, indigenous, low income communities and communities of color are experiencing higher levels of these direct health effects from fossil fuel usage.

For the first time, the UN Secretary General has outlined 5 critical actions to end fossil fuel exploration.

Development and use and commit to building a resilient and just renewable energy future. These include one making renewable energy a public good.

2, improving global access to components and raw materials. 3, leveling the playing field for renewable energy technologies.

For shifting energy subsidies from fossil fuels to renewable energy and 5 tripling the investments made in renewables.

As physicians, students, and public health professionals, we need to come together and show our support to cut our dependence on fossil fuels and protect our community’s health.

Today we call them world leaders to take bold action and respond to Secretary General’s ambition agenda during the UN climate ambition summit next week.

It’s time to stop fossil fuel corporations from destroying our health for profit. The march to end fossil fuels is leading the movement forward and these are our demands.

Stop federal approvals for new fossil fuel projects like the Willow Project and the Mountain Valley Pipeline.

Phase out fossil fuel drilling on our public lands and waters. Half fossil fuel exports and investments abroad and turbocharged
And provide a just transition to renewable energy future that generates millions of jobs while supporting workers and community rights, job security and employment equity.

Thank you.

Alright, so our third speaker is Dr. Lauren. Michelle, she’s an instructor of infectious diseases.

She has a master’s in epidemiology and she does research in emerging respiratory virus infections.

And she also has a very strong interest in the interplay of infectious diseases and climate change.

Thank you so much for having me. So I wanted to give a little bit of background and kind of knowledge about infectious disease. And kind of knowledge about infectious disease and climate change. And I think most of you are students.

And kind of knowledge about infectious disease and climate change. And I think most of you are students. So you probably know from a lot of your lectures that infectious disease is very detail oriented.

It’s the devil is really in the details. You can’t necessarily generalize, but oh, this is happening with live disease. This is also going to happen with the plague.

You have to know really those details. And that’s also very true. That said, it is estimated that about half of all infectious diseases are going to change in some way related to climate change.

Of those, 75% will increase in incidents in some way. With the remaining 25% changing their epidemiology, so changing their location or decreasing in epidemiology related to hotter conditions or weather conditions.

Is by the IPCC. The things we really want to focus on and the diseases that will really change are vector born diseases, so tick-borne diseases or mosquito corn and also waterborne diseases, which makes sense.

These are environmental pathogens. Thinking about tick-borne diseases, we are very well acquainted with that here in Connecticut, but we can see that the soy scopularist tick is expanding in its region and also with milder winters and warmer springs.
You just have more ticks. There's a longer time when people can become infected. And this tick's sort of scopular.

Transmits a ton of things, not only Lyme disease, but anaplasmosis, babesiosis, and then other ticks also are expanding their ranges.

Thinking about mosquitoes, mosquitoes love warm and wet temperatures. So if you're having hotter temperatures in gender, you've greater in general you've greater heat capacity in the clouds so you have more rain so you then kind of larger say mosquito breathing.

You need to have a very large dengue outbreaks in Southeast Asia while here in Connecticut we see potentially more and different arbor virus diseases.

So a couple summers ago, yeah, a lot of triple E, we've not a lot, several cases of triple E, which is a lot.

And then most recently this summer we have a Jamestown Canyon virus that has been found in 12 different towns not in people but in mosquitoes when they tested them which also causes a meningitis and encephalitis.

Then moving on thinking about waterborne diseases, different bacteria really liked proliferate when it's warm.

One we were talking about earlier, we're talking about earlier, which causes, especially when you've cuts on your hands, can cause an necrotizing skin top tissue infection, and specifically an even compromise people, but also an incompetent people could cause a really severe static shock and people can die from it, which has been reported.

Because you have warmer ocean temperatures than this bacteria season can is longer and you're more likely to be at risk for infection for a longer period of time.

Now, besides these 2 more direct areas, waterborne diseases and then. Tick Warner, Arthur Prideborne diseases, we can also think about more indirect waste infectious diseases can be impacted by climate change.

So few of these really extreme weather events like people being displaced from the homes by fires or like in Libya, then you also have people in refugee camps or clustered together in ways they weren't classroom before.

So you can have different infectious these outbreaks in these displaced persons populations. We also really have to think about if animals are changing their effort where they live where they can live
related to climate then that will push animals to have different interactions with humans and push them more so to interact in different ways with us.

70 00:14:24.942 --> 00:14:37.942 Allowing for different spillover and spill back of pathogens. Spillover is where there’s a, say, a zoo anotic infection that comes into humans and spill back is when we give something back to them.

71 00:14:37.942 --> 00:14:47.942 And we’ve all just lived through one pandemic or living through it still. And then we really want to try and decrease this ability, this these outbreaks from happening.

72 00:14:47.942 --> 00:15:01.942 But the overall should not despair. There is still time for action. Things to think about that we should do specifically regarding to infectious disease is that we want to have better infectious disease surveillance, better health care capacity for these big.

73 00:15:01.942 --> 00:15:09.942 Stresses that we put on the system in addition to different climate mitigation and adaptation and reducing fossil fuels.

74 00:15:09.942 --> 00:15:18.942 Thank you guys. Happy to talk more about it.

75 00:15:18.942 --> 00:15:35.942 Okay, so our next speaker is Matt Anderson, who’s a second year medical student. And he’s also a leader of Yale’s medical students for a sustainable future.

76 00:15:35.942 --> 00:15:41.942 Hi everyone. I want to take a moment to thank you all for coming here to acknowledge the threat of climate change and want to express gratitude to Dr.

77 00:15:41.942 --> 00:15:53.942 Erica Frank for inspiring this event. And to my colleagues at the Yale New Haven Hospital and the School of Public Health to help me organize this.

78 00:15:53.942 --> 00:15:58.942 So I’m here to represent the perspective of medical students. I see a lot of medical students here, so you’re probably familiar with my perspectives.

79 00:15:58.942 --> 00:16:06.942 But in general, I’m very fortunate to be part of a community where my peers are passionate about addressing the climate crisis and who are motivated to make a difference.

80 00:16:06.942 --> 00:16:36.942 But we’re also deeply concerned. Anxious and unprepared to deal with the significant public health impacts of the climate crisis that these doctors have just Our institution has only just begun to educate us on the health effects of climate change and the progress that’s been made thus far has been championed through the dedication of very few faculty members and many busy medical students dedicated to improving our curriculum.

81 00:16:36.942 --> 00:16:43.942 The immediate reaction of many students, to this curriculum has been skepticism asking, what can we do with this information?
We’re not yet doctors treating patients and we lack the authority to allocate resources to address climate trends. Moreover, our training exposes us to numerous moral and ethical issues, making it easy for the climate crisis to be overshadowed. However, I believe that medical students and especially those at this generation have crucial roles to play. Let me share 2 examples.

First, as students, we can influence our educators to prepare for the challenges posed by climate trends. Our renowned institution is a hub of clinical expertise and can set the standard for cleaner jet future generations of clinicians to come. If our aim is to shift values and norms regarding climate threats, we are uniquely positioned. With the ability to make incremental but indelible improvements in the education of clinicians to come.

This is the current goal of MS 4 SFA. Yeah. Over the past 2 years, we have been working, to impact our education to teach our peers about the health effects of climate change. While it’s only a fraction of our education, we hope it sparks an awareness that something is seriously wrong on a large scale.

And that it inspires further exploration and action. Second, as medical students, we must be prepared to bring our change to our future practice. My peers and I inherit a rich academic lineage. But along with it, the shortcomings of a system that was built in a world that no longer exists.

It’s a system that is not prioritized equity. Resource stewardship or patient empowerment.

Well, my peers and I will remain students for many, many years. We will soon be part of emergency departments operating rooms, private practices, and community clinics across the country. We will have the power to treat and inform our patients. Our actions will directly impact the sustainability of our system, whether it’s the use of different anesthetic gases or the selection of our electricity providers and we’ll be able to influence health system leaders through advocacy and research.

Health care is more complex than ever, but by staying informed on crucial issues and by identifying ways to improve our practices, we can drive real change.
Being a competent physician requires understanding the context and what your patients live, play, learn, and work. The ways in which our environments are impacted by the climate crisis as a salient component of that context. I’m proud that my peers and I are advocating for and equipping ourselves with necessary tools to address these challenges. Thank you.

Okay, so now I’ll say a few words and then we’ll leave our. Start speaker for less.

So you’ve been hearing about how Climate change really represents a public health crisis and a major, if not the major public health challenge of the 21st century.

What I want to emphasize is that, well, and that we have to. You know, the solution, of course, is to, convert from fossil fuels to renewable energy.

Where we have to stop burning fossil fuels. Well, I want to emphasize is that even if climate change were not happening, that converting from fossil fuels to renewable energy would still be a public health triumph.

Okay, and the reason is that when we burn fossil fuels, we of course emit carbon dioxide, which is the greenhouse gas that’s causing all this trouble.

Toxic air pollution like find particulate matter. Like nitrogen oxides, like precursors of ground level ozone.

And this is something you all should be aware of if you’re not already. Fine, the estimates are that.

Fine particulate matter alone. Kills between 5 and 10 million people per year globally. Okay, so it’s a major killer in the world.

And so if we eliminated fossil fuel burning, which would greatly reduce fine particulate matter in the atmosphere.

We’d save millions of lives. And that’s an immediate benefit. Right, so the We do, we absolutely have to reduce fossil fuels and eliminate fossil fuels in order to address climate change.

But that’s going to happen kind of over a longer period of time. I mean, even if we, even if we stop burning all those fuels tomorrow.
We still have a certain amount of climate change baked in, so temperatures are going to continue to increase, which means that the health effects would continue to get worse.

But we have the silver lining. Major silver lining that we have the immediate health benefits of saving millions of lives.

So. Next point I want to make is that the demand to end up fossil fuels is not a radical demand.

So first I wanted to point to a 2021 report. By the International Energy Agency, which is a very mainstream organization.

And they concluded that in the quote There is no need for investment in new fossil fuel supply. Okay, so no new fossil fuels.

And then I’d like to combine that with with something that the 20 was concluded by the intergovernmental.

Panel on climate change, which is another very mainstream organization in their 2,023 synthesis report.

That emissions of carbon dioxide over the lifetime of existing fossil fuel infrastructure alone. Will lead to warming of greater than 1.5 degrees centigrade, which is the goal of the Paris climate agreement.

So just what we have now is a big problem, right? If we if we just allow all of that.

You know, if we don’t in some of the current infrastructure early, we have, we’re gonna overshoot that 1.5 degree goal.

Let alone think about what’s going to happen if we continue to build out fossil fuels, which is currently what’s going on.

Okay, so it’s not a radical demand, but it’s a very urgent demand. Finally, what’s actually happening in the United States?

So the inflict inflation reduction act is really a tremendous step forward for. Renewable energy.

However, the Biden administration is kind of taking 2 tracks here. They approve, for example, this big Mountain Valley pipeline project, which is major fossil fuel infrastructure.

They approved the Willow project, which is for oil drilling in Alaska, another major project. So in effect what they’re doing is what you might call an all of the above.

All of the above energy strategy, which really is not what we need right now. So This strategy is unnecessary according to the International Energy Agency we don’t have we don’t need to build out more fossil fuel It’s dangerous, obviously.
And it’s also a threat. Terms of what we’re thinking about. A major threat to public health.

So really. Fossil, we need to end fossil fuels. It has to stop.

So.

Okay, so now for our final speaker, it’s a visitor, Dr. Erica Frank.

Who is a MD and MPH. Okay, preventive medicine, that’s great.

And she’s also, and alumnus of, Yale Medical School.

Right. Yeah.

Alright. She’s currently a professor at the University of British Columbia. She’s a past president of Physicians for Social Responsibility and she’s also the steward’s for social responsibility and she’s also the steward.

This is great of the 1,985 Nobel Peace Prize for the International Physicians for the Prevention of Nuclear War Canada.

So.

So.

Well, I have this object. But I’m, here I think mainly in the next 5 min to role model how a life while at and after Yale can be really powerful even in the context of wearing a dock hat or public health head or public health head or another health provider public health head or another health provider.

So, I’ve always been interested in, advocacy and in social change. And there are 3.

Major academic policies that I have done that might be useful for you guys to know about. First though to tell you I was not flown in as a ringer, okay?

That is, that would be really terrible. And in fact, the piece that I want to really make sure that you see and hopefully remember perennially.

So what I’m telling you is this graph. Start a website called visualcarbon.org.

And this is climate change one flight round trick for the black. common class, round trip in grade bars or first class from Vancouver to any of these places in comparison with this line.
For carbon emissions that are sustainable. And 2 degrees. Increased. In our environment.

And these bars are the average conditions for people in these different countries. And these bars are the average conditions for people in these different countries.

So bottom line this. From here, going on to Boston and then to Germany. And so I am going to have the carbon footprint of this trip to Berlin at the economy level.

But I’m gone from Vancouver until probably it’s better because I’m doing this small.

Because I’m having this huge carbon expenditure and I have other things I am meeting in Africa and and so rather than going back to Vancouver, I catch surfing with my best friend.

With Karen and his husband for this week and. Of course, since I was gonna be here and today is the global climate strike day, I was like, Well, we must do something and so contacted a mutual friend who I’ve known since I did my fellowship at Stanford and here we are.

So the other 2 things that I wanna. Then the other 3 things that I want to mention briefly to is that All the flight piece.

I got the Board of Governors of University British Columbia where I’m a pro. To agree to a policy to reduce work related travel air travel by 50% by 2030 compared to prior to pandemic.

So, major change based on that piece of data, that graph that was like, this is the biggest thing by far than any of us.

Travel by air, 10% or so, the goal is ever travel by air. And the 2 to 3%, you do so over here.

We, this is a place where our personal decision-making and our influence on what’s normative for our peers about travelling to a conference.

To hear that there’s somebody. They’re like not acting on what they want to what they say we should all do.

This is the place where our personal action and how to influence our ecosystem can make a difference.

The other place where I need a meaningful academic difference. It’s in 2 pension bucks. And before that, at TIAA, which is where all US academicians have the opportunity to put our funds.

And when I went to, as faculty in 1993. There was a social choice bar and I put all my money into that with TAA.
But they're about 7 years so I realized it was an awful lot of serious carbon and there's in that social choice stuff.

So made an appointment with some other leaders from physicians for social responsibility and went to New York when I was going to be there anyway to their headquarters and a year later, Ti, now with the low carbon.

Social and screening fund that had all the original social screeners plus the little carbon. It's not like a perfect one by me.

So he now has over. Yeah. Of pension plans. And that was like, they probably happened soonish anyway, but the fact that it happened 4 years ago was a hundred percent because I said and I did the same thing in Conversely, obviously the smaller effect.

No, we need to have an opportunity to be able Just put our money for our mouths. So those are things that I as followers here are problems with the power of applying education and credentials was able to, and just to include.

This Nobel Prize is the same sort of function. So this is This is the one that was cast so that you may need.

And I'm on the board of now. I was president of the American anxious. And this was in in acknowledgment, which was thought at the time to be intractable and still is.

But, this is testing. We know any, individuals who need social change. And that's what we're all about today.

So really, a chance to interact.

Thanks for coming. That's I said at the beginning. No, we've been scheduled a decision short event so feel free to leave but anyone I think probably a lot of us could stay a little longer if you wanna.