COVID-19 continues to spread across the United States and world and AUA members are actively engaged in their communities to battle this disease. We are joined right now by Dr. Steven Kaplan. Dr. Steven Kaplan is a professor of urology with Mount Sinai, in New York City, and he is an active member of the AUA's Research Council. Dr. Kaplan, what are you seeing right now in New York City?

Dr. Kaplan: New York has, unfortunately, become the epicenter for COVID-19 in the United States. And it has turned all our worlds upside down, from just the cultural, from the social perspective. It's almost become a ghost town. And from a medical perspective, it certainly changed the incredible pressure that's being put on our health personnel.

From the urology perspective, as there are now national guidelines about this in terms of decreasing the amount of elective procedures, so we've seen, virtually, a virtual shut-down of the cases in urology, which would be benign urologic cases. And only the most urgent cases, immediate cancer cases, torsion, stones, sepsis, things like that, emergency stents that need to be put in. And it's really cut down in virtually all practices, though some practices actually have shut down completely.

So it's been a major upheaval and the encouraging news, at least within New York, as we're testing more, and I think the governor talked about doing 10,000 cases per day, the number of cases has astronomically increased, but we're stable, fortunately, in the mortality rate, which seems to be a lot less, lower than the rest of the country. Unfortunately, we think our peak is, like the rest of the country, coming soon, which is why you're seeing, in certain states, that there is 100% of the work forces being asked to stay home.

We're still adapting, we're still adopting, and we still don't know a lot. But it's certainly impacted virtually everything that we do.

Host: Let's talk about researchers. How is the pandemic impacting laboratories and research studies right now?

Dr. Kaplan: Well, it's had a major effect. And I can just...to our our own institution, which I'm sure that other institutions, not just in New York but around the country are doing, essentially all non-essential administrative staff
and students and post-docs are being asked to work from home, and to remotely access whatever they need to access. [inaudible 00:02:18] basics research labs, starting next week, all our wet research labs are being shut down, to eliminate exposure and personnel interaction, and there are certain guidelines and criteria that are being put in there such as all lab personnel should consolidate any tissue culture lab activities.

From an animal research perspective, only critical animal experiments are being conducted and completed. From a clinical research perspective, which involves patient recruitment, that's being essentially shut down and stopped until further notice. These studies are obviously considered, from a clinical research perspective, for the most part, not essential and we don't want to put patients and faculty at risk.

There are certain safety and emergency numbers that are put in, security. So there's a lot out there. And in our institution, and I have no doubt this message is being conveyed, that from the upside, from all of this, if there is, at least it gives us maybe some time to think about our research endeavors and places of discovery that we want to be to because we will have some down time, and perhaps our brains can be working to develop new protocols and research grants and applying for research grants in the future, because we're not interacting so much on a day-to-day basis.

So it's essentially turned everything upside down, from the clinical perspective, from the research perspective. But we hear, still, a sense of optimism and hope and that we will all get through this. There is a very interesting Twitter, little movie that Matthew McConaughey did, and basically the red light will turn green. And hopefully we'll be ready for it, and just jump back in and be very, very productive as, hopefully, we'll go on together as a community.

**Host:** Dr. Kaplan, what other final takeaways do you have for our audience today?

**Dr. Kaplan:** So I think what we've learned is in times like this, we learn what we're kind of made of. And if you look at every day, we're getting...when the President comes up with his team, cross-functional collaboration is really the key. And for us, you can see how much more in discovery that we can do, and discovery is being vital right now. Virtually every day, people are looking at new therapies for COVID-19, new ways of diagnosing it. It's been heartening, in a certain sense, to see the worldwide community working together, for the most part, trying to come up with cures.
And I think the message for us, in our world of urology, how important is this gonna be for us to have...to collaborate. It's very, very important to collaborate and communicate, because we will be stronger when all our aspects, all our verticals within the research community, our basic scientists, our translational scientists, our clinical researchers, our behavioral scientists, population scientists all work together to try to come up with really the best type of this discovery together.

So I'm hopeful. I'm optimistic, and I think together, we will be a stronger community, both in the urologic community, but in the medical community as a whole.

Host: Dr. Steven Kaplan is a professor of urology with Mount Sinai, in New York City, and he's an active member of the AUA's Research Council. Thank you, Dr. Kaplan for joining us today.

Dr. Kaplan: Thank you for the privilege of sharing my thoughts. Thank you and stay well, stay sane, and stay sanitized,

Host: Washington State was one of the first to have confirmed cases of COVID-19 in the United States and has been on the frontlines of this disease. Dr. John Gore is a professor at the University of Washington in Seattle, and he joins us now. Dr. Gore, tell us about your experience with COVID-19 in the state of Washington and how it has impacted academic and institutional urology, as well as just physicians overall.

Dr. Gore: Obviously, in Washington State, in King County in particular, which is where Seattle is located, that was the first place in the United States to have a documented COVID-19 positive case. That was back in the end of January 2020. And then we are enforcing, we're the first place to have a COVID-19-related death, and that was in the last part of February. Since then, unfortunately, similar to other places across the globe, we've seen an exponential increase in the number of cases, including very similar experiences with the severity of cases with a proportion of patients requiring hospitalization, a proportion of those patients requiring ICU care, ventilator support, things like that.

In case people aren't aware, actually, Washington has recently been far surpassed in the number of cases by New York, probably just due to the much greater population density of New York, but that's been our experience so far.

We have several hospitals in the greater Seattle area that are reporting problems with capacity related to COVID-19 cases. And one of our UW Medicine
hospitals recently had to convert the ORs into an additional ICU to help manage the additional COVID-19 cases. So rather than cancelling all elective cases, the OR has essentially completely shut down, except to the most emergent of cases.

Host: What has been the role of urologists throughout this outbreak in Washington state?

Dr. Gore: Mainly right now, that role has been to support what is needed, to support our hospitals' capacity to address the sort of coming increase in patients arriving at our hospital doorsteps. And so, I think, the main role has been to participate in conserving personal protective equipment, conserving hospital capacity, and that's mainly been via cancelling many of our more elective cases. And elective is a hard word to interpret. I've seen this and I like this, this sort of reframing about essential cases, but you know, many of even the cancer cases we do in urology aren't truly urgent. Things like prostate cancer, small renal masses. And so we've put all of those on hold and many of our colleagues in the community in the greater Seattle area have done the same thing. We've seen a lot of that across the country as well, where most urologists appear to be participating by helping preserve personal protective equipment, because that's one of the biggest threats with COVID-19 is making sure that our healthcare workers at the frontline have adequate protective equipment, and keeping patients out of the hospital, because that helps us have hospital capacity to accommodate the increase in numbers of these patients.

I think it's also really important to understand that healthcare workers are particularly at risk with the COVID-19 outbreak and pandemic. And what I mean by that is because such a large proportion of these patients are pre-symptomatic, and we're learning that even pre-symptomatic patients can be infectious, I think it's important for urologists to recognize that their own patients can be a threat to them and bringing patients in for more elective surgeries right now not only is going to sacrifices needed what we call PPE or personal protective equipment, but it's also gonna potentially expose you and the healthcare team, including anesthesia providers, nursing providers, to a patient who could potentially be COVID-19 positive. And that's important due to the lack of disseminated testing.

Host: Are you seeing burnout among the healthcare providers and physicians involved, and if you are, what can these providers do to minimize the impact of that?

Dr. Gore: I think burnout is less of a threat to urologists. At the current time, we, in Seattle, are not being redeployed for clinical care in other domains that is
being reported in New York as we try to have adequate personnel to care for all the patients that need care. We have been asked locally to provide sort of a listing of our skill sets so that if we need to redeploy, you know, I may not be a great ICU doctor, but I can help with general emergencies in the emergency room or general surgical care for emergencies in the operating room or even as a general healthcare provider for people who need follow-up visits or urgent care visits. So there are some things that we might be asked to do, but we haven't yet.

I think where we're really seeing burnout is in individuals on the frontline and those are ER docs, ICU docs, hospitalists and nurses and nursing staff, nurses' aides, medical assistants, people who clean and sanitize our hospitals, and that's where they're being asked to do a lot and they are definitely carrying the load. As surgical subspecialists, you know, our main job is to help support those individuals as best we can.

I do think, importantly, for our audience of urologists, you know, I'm at a university, I'm an employed physician, but I also know that this is a threat to a lot of urologists, self-employed urologists across the country because you have a lot of overhead and we're in a period where we're not seeing a lot of revenue come in because of clinical restrictions. And so it's gonna be a really challenging time for all of us and so we have to support as best we can.

**Host:** Do you have any other advice for your colleagues who may be preparing at their institutions and practices?

**Dr. Gore:** I think we are, unfortunately, behind the curve in Seattle. If you look at the timeline of when we really should have enacted some of these more austere measures to prevent, you know, an exponential growth in cases in a greater Seattle area, we are behind. I think a lot of municipalities are ahead of the curve. If we, at the same time as most other cities across the country are banning elective cases, social distancing, doing everything we can to minimize the burden of this pandemic on our healthcare system, it may not flatten our curve, locally in Seattle, but it will in your area.

And so I think some things to remember are, number one, we need to do our part to preserve personal protective equipment. Number two, in this uncertain pandemic, your patients can be a threat to you, so you need to protect yourself, and one way to do that is to keep patients out of your clinic, keep patients out of your hospital for the time being, unless they really, really need to be there. And number three is you may find, six weeks from now, eight weeks from now, that your hospital didn't run out of PPE, that your hospital had enough masks, had enough hospital capacity, had enough ICU capacity, and it may make you
question, you know, participating in some of these austere measures, but I think what you have to understand is that's a victory. And if that happens, that means that you've done your part, that you've helped our society, our communities, our local communities, our regional communities accommodate this epidemic, this pandemic and do our part for global health. So if that happens, that's a good thing.

Host: Dr. John Gore is a professor of urology at the University of Washington in Seattle. And thank you, Dr. Gore, for joining us right now.

Dr. Gore: Thank you so much. Stay safe, everyone.

Host: Joining us right now is Dr. Micheal Darson of Phoenix, Arizona. Dr. Darson is a practicing urologist at Arizona Urology Specialists, a large practice of 25 physicians with 11 offices across the greater Phoenix region. Dr. Darson, as of March 19th, Arizona had just under 30 cases of COVID-19 in the state. Is your practice preparing for a worst-case scenario?

Dr. Darson: Casey, yeah, absolutely. Due to the growing pandemic, we feel that our availability is key, but also, we need to be available and able to care for all of our patients. We're currently following the guidelines from the CDC, the American College of Surgeons, and the American Urological Association, in regards to limiting visits to urgent or emergent issues only. Additionally, we're limiting our ambulatory surgeries to only those that are urgent or emergent.

Host: What are the major things that a large practice should be thinking about right now as they prepare for this ongoing pandemic?

Dr. Darson: Well, I think, obviously, first and foremost, we're looking at strategies to keep our employees, staff, and providers safe. We're making sure that nobody comes to work that has any kind of COVID symptoms. We're following the guidelines of the CDC in regards to staff and/or providers who may or may have not been exposed. So we're literally following these recommendations that are changing and very fluid.

Host: So what are you doing to prepare your practice locations in terms of telemedicine and other items such as postponing elective procedures?

Dr. Darson: We're limiting our in-person visits and surgeries to just what we consider urgent and emergent. Since it is a fluid situation, what we're doing is taking as much science and data as we can find, and then applying it to individual situations, with the ultimate goal of trying to do what's best for patients. Additionally, we're deploying a telehealth platform to try to continue
to serve the remaining patient load during this time. Additional strategies, actually, we're trying to look into a virtual waiting room, where a patient register, but then wait in his car, his or her car until instructed to come in and they will be taken immediately into a patient exam room, and thus provide social distancing, but still being able to see and available to see those patients that really require some type of urgent urologic disposition.

Host: Dr. Darson, if you have anything else to add or any other final takeaways for our audience, please feel free to let us know now.

Dr. Darson: I think I would just say that we, at Arizona Urology Specialists, are like the medical community in general. We're committed to providing care to as many patients as we can during this troubling times, and are trying to remain able to adjust to recommendations that are changing, at times, hourly

Host: Dr. Micheal Darson of Phoenix, Arizona has been our guest, is practicing urologist with Arizona Urology Specialists. Thank you again, Dr. Darson, for joining us.

Dr. Darson: My pleasure, Casey.