

2020 American Society for Clinical Investigation Presidential Address

Disruptions in the realm of medical science

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American Society for Clinical Investigation members, it is surreal that today we should be gathering for the Joint Meeting in Chicago and instead we are in the midst of a pandemic with global long-term consequences. While this situation has prevented us from being together, the themes embedded in the planning for the 2020 Joint Meeting are no less relevant today, as we face an unprecedented threat from this pandemic virus. Collectively, we face a palpable threat to all of humanity in which medical science is the vehicle that will sustain our ultimate survival and recovery. The theme for our conference this year, *Disruption in Medical Science*, is emblematic of the kind of work that lies ahead for us. The experience of COVID-19 has taught us in my institution that we can move and enact changes more rapidly than previously imagined. We are deliberately challenging and disrupting our models of care on a daily (sometimes hourly) basis. Our challenge in the next phase is to disrupt this virus itself, which we know will rely on expertise in virology and epidemiology as well as a host of other scientific fields. The burden of executing these innovations rapidly and rigorously will fall to us.

Today, as I make my rounds through the COVID-19 units, I am inspired by the spirit and dedication of our front-line hospital and ICU physicians as well as the residents and fellows who are the engine of both patient care and clinical discovery. I am encouraged by the work coming out of laboratories and clinical research programs to develop novel testing strategies, small molecule antivirals, and therapeutic antibodies. I am humbled by the staff who clean rooms, deliver meals, and run the computers and the facilities and never, ever ask for recognition.

In the past three months, consider the impact we have had in SARS-CoV-2 medical science. The genome and fundamental

biology of this virus are now well known. We have launched antiviral studies based on laboratory activity and are well on the way to a vaccine. All of us gravitate to our favorite modeling program each evening and are able to track the virus and anticipate to the day when we will reach critical milestones based on the impact of health policy measures, and we can see those models evolve in real time. This event catalyzes the statement that we are all in this together. And it demonstrates just how far we've come in cocreating a global health sciences infrastructure that supports and challenges all of us.

This is also our time to disrupt the position that science has occupied in our evolving global culture as we race into a future-state world that relies on scientific processes and methods in completely new ways. Let me be very clear. As we consider the aftermath of COVID-19, we are positioned not only to be recognized as heroes of an epic battle, but we must get ready to stand tall in engaging society as advocates and leaders. I challenge each of you to keep your eye on this lofty goal as we emerge into that future where we value science and rigor in decision making, policy, and education. It is also our responsibility to effectively prepare our world leaders and educate the public about discriminating between the science that will effectively disrupt the pandemic and messages that distract from that cause. It is up to us to demonstrate the value in innovation and creativity in driving solutions, and it is up to us to demand and lead this change if it is not offered or expected. We are fortunate to have a number of role models who are acting as guides for us in this present crisis.

Now, I want to pivot to recognize our special award winners and our new members. One reason we gather annually is to recognize the legends of our community, this year recognizing Dr. Stuart Orkin as the

Harrington Discovery Award recipient for his legacy in hematopoiesis and hemoglobin regulation, culminating in new therapies for sickle cell disease, Dr. Judith James as the Korsmeyer Award recipient for her impactful work in autoimmune disease and her extraordinary commitment to mentorship and training, and Dr. Andrew Lane as winner of the 2020 Seldin-Smith Award. We also celebrate the election of our newest members. Congratulations and welcome. Whether or not we gather in Chicago, as physician-scientists, we occupy a privileged position of holding skills as physicians and as scientists, and inclusion in this society recognizes exceptionalism in driving medical science that is impactful to human health. As an organization, we embrace the attributes that intersect excellence as both physicians and scientists, and as a global society, we will rely upon your continued dedication to exceptional rigor and astute observation to rapidly navigate into our post-COVID-19 world. To the Young Physician-Scientist Awardees launching your careers, make no mistake that we need you now more than ever. The disruption to laboratories and research programs for early career scientists especially is an acute pain that we all feel and are committed to finding solutions to. Kudos to the institutions that are proactively extending tenure deadlines and making other accommodations to assist fledgling programs in their recovery. This will be a priority because all of us as physician-scientists, whatever we study, will be a part of the rebuilding phase.

In the 2020 meeting, we had planned programming to accelerate the Young Physician-Scientist Awardee engagement in the larger medical science establishment, with a focus on networking theory and a planned networking exercise that was to have engaged all of our members. One of the effects of this pandemic has been to reveal more than ever how mission critical our networks are. We have all witnessed unfiltered sharing of experience from colleagues around the globe. Our world became a whole lot smaller when we real-

ized there was not one safe place on earth in the face of a pandemic.

Our networks and relationships remain central to our success in the mission I outlined above. For this reason, the integrity of the ASCI will remain intact, as the COVID-19 pandemic has revealed that interdisciplinary communication and collaborations that cross boundaries are tremendous facilitators of progress and reinforce the value in being a part of a diverse society, in addition to the focus we place in core disciplines.

Before I conclude, I need to take a moment to thank the ASCI leadership, John Hawley and Karen Guth, for their indefatiga-

ble efforts to support everything that we do as an organization. Deconstructing a meeting is as hard as hosting one, and they have done so gracefully and without hesitation. And to the members of the ASCI council, I am immeasurably grateful for the opportunity to have worked with each and every one of these incredible colleagues and friends.

Make no mistake. The world will be different when we reconvene in 2021. Our economy, health systems, and new cultural norms will depend on factors that we are not even aware of today.

Physician-scientists are the tip of the spear in each of those domains, and the

ASCI organizational priorities may take on new and varied purposes to achieve the desired evolution that lies ahead. As I pass the baton to your new president, Dr. Lorraine Ware, I am fully confident in her leadership and our society's ability to be courageous and bold in these months ahead. I look forward to the day when we can meet again. Be well.

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