Dear 2021 medical school graduates,

Years of hard work have paid off—graduating and successfully matching into a residency! The first day of internship has been humbling for generations of new physicians. As you accept responsibility for the care of patients, the imposter syndrome may be more real on Day 1 of internship than any other day during your career.

The COVID-19 pandemic caused disruption, impacting medical education as never seen before. As the pandemic progressed, states "locked down," and on March 16, 2020, the Association of American Medical Colleges issued its strong recommendation that medical students be removed from direct patient care activities. Like you, medical students around the country who were immersed in their clerkships had to leave the clinical learning environment for several months. Many of you may have had shortened core clerkships. Additionally, you may have missed simulations, grand rounds, important skills sessions, family-centered rounding, and team-based care. Instead, you found yourself in a virtual learning environment using online cases, recorded lectures, and video chat, but no direct patient care. You still may not have cared for a patient with COVID-19 because of personal protective equipment shortages or the uncertainty about the virus. You may be worried that you're lacking clinical skills compared to interns from past years.

You experienced this massive disruption to your learning amid a pandemic that threatened or affected your health and that of your loved ones, changed the way you lived, and resulted in isolation for many. You witnessed gross injustices that exposed the systemic racism within our country that compounded the deadly effects of the virus and sparked long-overdue attention and action.

Despite the complex challenges of this past year, we want you to know that you are prepared. In fact, because of the experiences faced, we believe that this year gave you an unparalleled and invaluable experience. You will be able to care for the patients who present to you on Day 1 of internship and beyond! While having a much greater responsibility for the lives of patients may create some anxiety, we would like to offer some additional perspectives for reassurance.

Members of the Class of 2021 are already part of the club of praised "Healthcare Heroes," a unique acknowledgement in a time of crisis that recognized the sacrifices, emotional burden, long hours, and distinctive aspects of healthcare delivery. You learned about doctoring during a global pandemic. You, too, witnessed physicians, nurses, therapists, and other staff go above and beyond for patients when visitation was restricted; patients were sick and lonely and the system was completely taxed. As all health care providers reflected on their purpose and values, the importance of compassion, altruism, empathy, and respect was at the forefront of patient care; you observed these values firsthand and can carry them with you into your future. These experiences this year have actually enhanced your education and will make you a better physician with a more expansive skill set.

Medicine has always responded during times of crisis. During WWII (1939–1945), many medical schools transitioned to accelerated 3-year programs to address physician shortages. Internships and residency training were similarly reduced in duration. During this time government programs and new legislation facilitated aiding licensure for graduates. At the start of the US involvement in World War 1, the American Medical Association requested for volunteers under the age of 50 from among its nearly 70,000 members. Within three months, 10,000 physicians volunteered. During the 1918 influenza pandemic, some students graduated early from medical school and board examinations were hastened to address the need. In 1952, Copenhagen, Denmark experienced a polio outbreak that overwhelmed resources. Approximately 250 medical students worked in eight-hour shifts, manually ventilating patients and exposing themselves to contagion. More recently, in the 1980s, physicians, health care professionals and students cared for patients infected with HIV, prior to any knowledge regarding the cause.

While medical students may not have been able to engage in direct patient care during the pandemic, they identified how to best contribute to overburdened healthcare systems. Medical Students responded to the overwhelming needs of patient communities by volunteering at Covid testing centers, reporting test results to patients and their families, educating them about prevention, developing community education programs to encourage vaccinations, and vaccinating community members. Students functioned as clinical care extenders, patient navigators and patient advocates while providing social support to those who were isolated.

This unique time of crisis allowed for operationalizing *Value-Added Medical Education*, a conceptual framework defined as "experiential roles that have the potential to positively impact individuals and population health outcomes, cost of care, or other processes within the healthcare system, while also enhancing student knowledge, attitudes, and skills in the Clinical or Health Systems Sciences."

You also learned new skills in telehealth, gained an appreciation for physical touch, and a reinvigorated appreciation for the physician exam. With increased availability and use of virtual patient care platforms, you are better able to appreciate how patients can be well-served by telehealth visits. In addition, the patient history became crucial to determine who needed to be seen in person. You also witnessed and addressed healthcare disparities in the severity of illness, mortality rates, access to vaccines, and barriers to telehealth due to lack of internet connectivity.

The class of 2021 jumped ahead of the curve in the skills of self-directed and lifelong learning. Many medical schools quickly converted the clinical experience into a virtual or hybrid experience by collaborating with faculty to bring learning materials online and develop innovative educational electives. Students often supplemented medical school curricula by finding online education videos, creating study groups, identifying new study resources, and participating in discussions around virtual patient care. Fewer scheduled learning sessions took place, as faculty and providers were pulled to care for patients and learn new platforms for

patient visits. Some students became the teachers for their preceptors in this high-tech environment. This ability to adapt to new styles of learning, teaching and patient care expanded the knowledge and skills of the entire medical education community. Your accomplishments lead us to believe that you have a growth mindset, characterized by embracing the challenges encountered in the past year. You have shown resilience and grit under difficult circumstances, both of which will be invaluable in your career as a physician.

As medical student educators, we want you to know that we believe in you! Although your skill set may be different from graduating students in the past, the Class of 2021 possesses a unique set of abilities that will serve you well as future physicians, healthcare team members, role models, educators, and leaders. Healthcare professionals hold a unique place of respect in society, which the pandemic affirmed and enhanced. We encourage you to embrace and recognize the unique skills gained during this exceptional time in history: humanism, innovative modalities of patient care, self-directed learning, and teamwork during a crisis. Use these skills to continue fulfilling patient and societal duties.

Sincerely,

The members of the Undergraduate Medical Education Committee of the AAMC:

Brenda Roman, MD
April Buchanan, MD
Lisa Coplit, MD
Robin "Rikki" Ovitsh, MD
Karina Clemmons, EdD
Carrie Bernat, MA, MSW
Win May, MD, PhD
Erik Black, PhD
Pearl Sutter, medical student

Please note the opinions expressed in this open letter represent the collective voice of the UME Committee members, and not the AAMC or the institutions of the individual members.

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