

## Letters to the Editor

**Physician–Scientists in the Era of COVID-19: Gone but Not Forgotten**

**To the Editor:** The COVID-19 pandemic has resulted in the redeployment of many physician–scientists and physician–scientist trainees to full-time clinical services, with their scientific research and academic training put on hold. Physician–scientists are provided with protected time, alongside their clinical duties to perform scientific research and receive academic training. Historically, they have contributed seminal scientific discoveries, and recent Nobel laureates are counted among their number. Yet in many countries, an extraordinary proportion of these trainee posts has been postponed due to the pandemic. In England alone, over 1,500 trainees—90% of the physician–scientist trainee workforce—were redeployed to clinical duties during the first wave of the pandemic.<sup>1</sup> The resultant drain on the global academic medicine community has been profound. The rationale is clear, but the long-term consequences for research and medical practice are grave.

Physician–scientists are vital contributors to global biomedical research efforts.<sup>2</sup> Bridging the divide between scientific research and care at the patient's bedside, they have led some of the most significant breakthroughs during this

pandemic, including findings relating to corticosteroids and hydroxychloroquine. But the stagnation of many of their research projects on high-impact diseases may contribute to the hidden mortality of COVID-19 for years to come. For example, the largest independent funder of cancer research globally announced a reduction in grants of up to 20% for the foreseeable future due to loss of revenue during the pandemic.<sup>3</sup> The Association of Medical Research Charities estimated that 70% of clinical trials and studies in the United Kingdom were stopped during the initial stages of the pandemic, and that it will take 4.5 years for medical research spending to reach prepandemic levels.<sup>4</sup>

Experiences from the COVID-19 frontlines have emphasized the importance of the clinical translation of scientific research. Yet the erosion of some of this research and academic training during the pandemic risks irreparably disrupting the translation process and threatens the future of academic medicine. As the number of COVID-19 cases falls, it will be crucial to reestablish physician–scientist roles promptly. Hearteningly, practicing in the previously evidence-free zone of COVID-19 has captured the academic imagination of a generation of physicians. Furthermore, the United States Congress has made at least \$3.6 billion available to the National Institutes for Health for a variety of COVID-19-related research

projects.<sup>5</sup> Despite the current disruption, given the opportunity, the pandemic may act as a springboard for propelling a new wave of physician–scientists.

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