

# Saving the endangered physician-scientists: reintroducing them to an environment of administrative support

Shreya Shah, Olivier Luc Villemain 

Department of Pediatrics,  
Labatt Family Heart Centre,  
The Hospital for Sick  
Children, Toronto, Ontario,  
Canada

## Correspondence to

Dr Olivier Luc Villemain,  
Department of Pediatrics,  
Labatt Family Heart Centre,  
The Hospital for Sick  
Children, Toronto, ON M5G  
1X8, Canada;  
olivier.villemain@sickkids.ca

Accepted 4 August 2020  
Published Online First  
26 August 2020

On March 11, 2020, the alarming spread and severity of the COVID-19 disease led the WHO to declare it as a pandemic. Around the globe, entire cities and nations came to a grinding halt. While many industry sectors projected and prepared for a steady decline in business, other areas boomed as demand increased at an unprecedented rate. Indubitably, and as is befitting during a pandemic, the healthcare industry revved up to deliver its best. Specifically within healthcare, administrators at all levels worked to establish the new normal for delivering care in a virtual world. Within this niche, administrative assistants for physician-scientists worked in overdrive. Calendars needed to be reorganized, conferences needed to be postponed, research teams and materials needed to be moved to online interfaces, and in-person meetings needed to be rescheduled to the videoconference platform of choice. The goal remained the same: to support the physician-scientists in all capacities so that they could continue to be their best version of clinicians and researchers.

In many ways, this pandemic has highlighted the importance of effective administrative support to the functionality of the physician-scientist. Perhaps even giving some new insight into the prevailing issue of 'saving', what Jain *et al* have dubbed as, 'the endangered physician-scientist'.<sup>1</sup> Physician-scientists play an integral role in the medical community, they are often the protagonists that drive forward the narrative of medical discovery and novel therapies. However, in the last few decades, the evolving role of the physician-scientist and the overwhelming demands of the job have led to a steady decrease in the number of people entering this career path. Many physician-scientists work in medical centers that provide them with the opportunity to oscillate between clinical and laboratory settings, allowing them to simultaneously practice medicine and take their questions back to a community of scientific investigation. This type of environment stipulates that the physician-scientist must wear many 'hats', including that of clinician, researcher, laboratory manager, educator, and administrator (figure 1). This has been identified as being the crux of the issue and the modern physician-scientist is pulled in many

directions, each direction requiring equal amounts of attention and productive outcomes.<sup>2</sup> This is where the danger starts, because within each 'hat', there is also a surreptitiously hidden administrative burden. This is the administrative burden of planning, coordinating, and organizing. These tasks include scheduling clinical activities, scheduling meetings, hiring and onboarding students, budgeting and financing, tracking credits of educational activities, and managing one's calendar, just to list a few. The biggest resource required to complete these tasks is time, which is already in short supply. For many, clinical and educational obligations are priority and cannot be negotiated. Thus, the physician-scientist must borrow time from their research activities, cutting into grant writing and experiment design. This loss of time is increasingly detrimental, especially in an era where grants have low funding rates and attainment of resources has become more competitive than ever. In 2010, both the Canadian Institutes of Health Research (CIHR, Canada) and the National Institutes of Health (NIH, USA) reported a decline in grant approval at 17%–23% and 5%–24%, respectively.<sup>3</sup> More recent data show that this insidious downward trend has continued. In 2018, success rates for CIHR grants were below 15%, effectively only 1 in every 6 applications was approved.<sup>4</sup> According to Andrew I Schafer, author of *The Vanishing Physician-Scientist?*, 'at every point in the early life cycle of NIH funding, physician-scientists are more likely than PhD biomedical scientists to leave the NIH grant applicant pool.'<sup>4</sup> In this book dedicated to the subject, the author explains the difficulties and complexities of administrative tasks that are incumbent on the physician-scientist. Indeed, the perpetually increasing administrative burden and lack of support is acknowledged by many who are exploring the issue of the endangered physician-scientist; however, solutions tend to focus around mentorship, increased protected research time, and clinical support.<sup>2,5</sup> In addition to these solutions, it is also imperative, even vital, to provide the physician-scientist with effective administrative support to handle the organizational burden. In order for the physician-scientist and the administrative



► <http://dx.doi.org/10.1136/jim-2020-001582>



© American Federation for Medical Research 2020.  
No commercial re-use. See rights and permissions.  
Published by BMJ.

**To cite:** Shah S, Villemain OL. *J Investig Med* 2020;**68**:1206–1207.

A **SUCCESSFUL** relationship depends on the full **INTEGRATION** of the administrative assistant's duties and responsibilities with the physician-scientist's work structure



**Figure 1** Venn diagram showing that the job scope of the administrative assistant should directly correspond to the responsibilities of the physician-scientist.

assistant to have a fruitful relationship the roles and responsibilities of the administrative assistant must reflect and be integrated into the day-to-day responsibilities or ‘hats’ of the physician-scientist. This synchronization of job duties is essential to allowing the administrative role to effectively offload the responsibilities of the physician-scientist in a multifaceted capacity. As such, the job scope of the administrative support must be clearly defined.

There are a few different possible approaches to defining the role of the administrative assistant. From an instructional standpoint, certification programs and courses centering on healthcare administration, medical terminology, and applied research provide formal education and training. Conversely, organizations may choose to implement a personalized training process pertaining to their organizational structure and needs. The focus is to ensure that the administrative assistant is able to work in a comprehensive manner alongside the physician-scientist.

So how does this relationship translate into everyday activities? In essence, the administrative assistant must work as a reflection of the physician-scientist to handle all periphery obligations, allowing the physician-scientist to devote their time to their primary objectives. Fundamentally, this is caring for patients and improving that care through research. For example, the administrative assistant should offer centralized calendar management—coordinating meetings according to priority, arranging all aspects of travel obligations, and working with the clinical team to ensure that clinic time is appropriately booked. From a research perspective, the administrative assistant should be involved in all aspects of the grant cycle, from submission to setting up received funds, including, taking care of institutional requirements, coordinating peer review meetings,

ensuring the proper curriculum vitae format is updated, and working with coapplicants to ensure all required paperwork is in order. In this way, the physician-scientist’s day-to-day burden is lightened.

The beauty of the administrative role is that, as long as all parties are in agreement, there is no limit to the scope of tasks that the administrative assistant can provide support with. In a more advanced capacity, the administrative assistant can help manage budgets, organize conferences and symposiums, and act as the point person for the physician-scientist’s clinical, educational, and research activities. It is important to note that for the cohesiveness of this working relationship, the administrative assistant must be well integrated with all team members of the physician-scientist, working simultaneously with clinical and research teams. Ultimately, saving the endangered physician-scientist is a complex issue that requires a multifaceted approach and therefore a multifaceted team. Crises such as the one we are going through with COVID-19 must remind us at some point that this hidden issue deserves our attention. The impact of well-structured administrative support is extremely valuable as it ultimately allows the physician-scientist the necessitated time, space, and energy to pursue the endeavors of medical discovery.

**Correction notice** This article has been corrected since it was published Online First. There were typographical errors in the second paragraph; edits have been made for clarity.

**Twitter** Olivier Luc Villemain @Villemain\_Team

**Contributors** SS and OLV conceptualized and designed the study, drafted the initial manuscript, and reviewed and revised the manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Not required.

**Provenance and peer review** Not commissioned; internally peer reviewed.

**ORCID iD**

Olivier Luc Villemain <http://orcid.org/0000-0002-8260-9324>

## REFERENCES

- Jain MK, Cheung VG, Utz PJ, *et al.* Saving the Endangered Physician-Scientist - A Plan for Accelerating Medical Breakthroughs. *N Engl J Med* 2019;381:399–402.
- Alvira CM, Steinhorn RH, Balistreri WF, *et al.* Enhancing the development and retention of physician-scientists in academic pediatrics: strategies for success. *J Pediatr* 2018;200:277–84.
- Gordon R. The vanishing physician scientist: a critical review and analysis. *Account Res* 2012;19:89–113.
- Schafer AI. *The vanishing physician-scientist? Ithaca.* Cornell University Press, 2009.
- Agarwal S, Spiekerkoetter E, Austin ED, *et al.* Career development of young physician-scientists in the cardiovascular sciences: perspective and advice from the Early Career Committee of the Cardiopulmonary, Critical Care, and Resuscitation Council of the American Heart Association. *Circ Res* 2018;122:1330–3.