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Symposium: New Directions in Orthopaedic Education

Editorial Comment: New Directions in Orthopaedic Education

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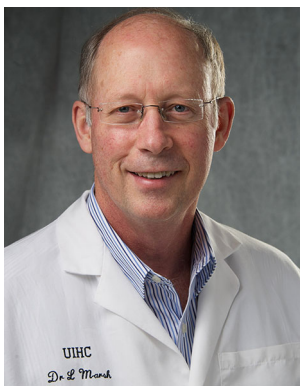
In 1819, American author Washington Irving published his famous book about a fictional character who falls asleep for 20 years, and when he awakens, struggles with the enormous changes that have occurred in his village. Similarly, the articles published in this education symposium highlight the evolution of orthopaedic graduate medical education, and offer a glimpse into the changes that are on the horizon, leading us to ask, "If we woke up in 20 years, what would orthopaedic education be like?"

Ultimately, the orthopaedic educator has the responsibility to contribute to the development of a workforce that meets the musculoskeletal needs of society. The training environment must be cost-effective and equally prioritize patient safety, quality of care, and resident education. Although we should take pride in what we have done in the past, we believe these articles will inspire you to think differently about the future of resident education and how we can better achieve our ultimate goal. This can, perhaps, be conceptualized in three domains: (1) Whom we train, (2) what we teach, and (3) how we teach.

It all starts with the identification of those individuals who will constitute our future workforce. Despite the prevalence of musculoskeletal problems in our society, medical students do not receive adequate exposure to orthopaedic surgery in undergraduate medical-school curricula. Although this has obvious implications for their opportunity to learn the basics of musculoskeletal care, it also limits the pool of applicants who will pursue a career in orthopaedic surgery. This is concerning in a profession noted for its lack of diversity, and we must persevere in our efforts to address this gap on behalf of the public and the next



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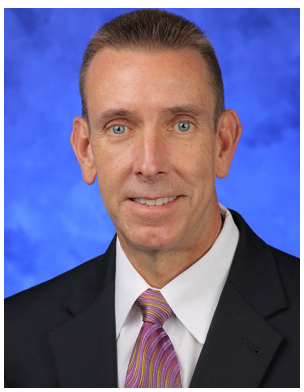
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Symposium: New Directions in Orthopaedic Education

generation of physicians. Similarly, we must also think critically about how we choose those students who will become our residents and the future of our profession. There is far more to becoming an orthopaedic surgeon than intelligence and test taking ability, and every orthopaedic educator has struggled with telling an outstanding medical student that his or her Step 1 scores are too low, while also recognizing the inadequacy of this metric as a predictor of future success.

Each day there is more for our residents to learn, and at least currently, only a fixed time in which to learn it. Medical students must learn not only the traditional competencies focusing upon medical knowledge and patient care, but they must also acquire the ability to provide high-value care in a complex and fast-paced healthcare system. Additionally, the 21st century orthopaedist must understand the economics of our healthcare system, the fundamentals of process improvement, communication skills, and how to function within (and lead) a healthcare team. We must consider every element of our educational process and determine if it is consistent with our learning goals, while not compromising quality and safety of care.

Although early in its development in orthopaedic education, simulation training has great potential to help achieve our goals. Orthopaedic surgery is hand-eye intensive, and in the next 20 years, learning the necessary skills more quickly and effectively in an environment that maximizes patient safety will be a goal that can (and should) be achieved. Although there can be substantial expense associated with these tools, who would argue with the premise that what can be learned via simulation should be learned prior to delivering "hands on" patient care? Ultimately, we may find that these techniques result in not only higher-value care, but also cost savings for the hospital and educator.

We believe the authors in this symposium provide a thoughtful and accurate glimpse into some of the many changes that are influencing orthopaedic resident education. And if we, like Rip Van Winkle, were to awaken in 20 years, we hope that we would be pleased with the changes that had occurred.