

INTRODUCTION

Education methodology and metrics in the training of neurosurgical residents**Randy L. Jensen, MD, PhD, MHPE,¹ Nir Lipsman, MD, PhD,² Sepideh Amin-Hanjani, MD,³ and Michael M. Haglund, MD, PhD, MACM⁴**¹Departments of Neurosurgery, Radiation Oncology, and Oncological Sciences, University of Utah, Salt Lake City, Utah;²Department of Neurosurgery, University of Toronto, Ontario, Canada; ³Department of Neurosurgery, University Hospitals/Case Western Reserve University School of Medicine, Cleveland, Ohio; and ⁴Department of Neurosurgery, Duke University, Durham, North Carolina

THE future of neurosurgery will be determined by the effectiveness of training our current and future residents and fellows. This issue of *Neurosurgical Focus* highlights current innovative work being done around the world to improve and measure outcomes of neurological surgery trainees. The included work describes an examination of the validity of a surgical autonomy program for neurosurgical training, as well as an evaluation of methods for trainee milestone evaluation and feedback. These studies describe ways to improve learner feedback from supervisors. A group from the Mayo Clinic describes a model of mentorship in neurosurgical training that has unique aspects to be considered by other programs. A curriculum for helping residents become better teachers is also included and may prove helpful for other institutions to implement similar programs. Various aspects of using e-learning, simulation-based teaching, and virtual reality for operative microsurgical training are also found in selected papers.

These well-done studies demonstrate the possibilities that contemporary learning methods can add to the armamentarium of neurosurgical educators. The prevalence of “imposter syndrome” in young neurosurgeons and trainees is examined by another group with an accompanying editorial. The question of the influence of a night-float system versus that of a 24-hour call schedule on resident operative experience is also examined by an experienced neurosurgical training program. One of the selected studies outlines tools for creating a virtual neurosurgical sub-

internship program that others could use to expand the influence of their program on medical student training and recruitment. Within this issue, the reader will find a number of useful ideas from neurosurgeon-educators around the world to improve and supplement their current educational and programmatic efforts.

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Correspondence

Randy L. Jensen: randy.jensen@hsc.utah.edu.