Since its introduction more than 20 years ago, technology for image-guided surgery (IGS) has found mainstream acceptance in both endoscopic sinus surgery and endoscopic skull base surgery. In fact, IGS has played a large role in the growth of endoscopic sinus surgery techniques, especially in more complex applications (such as frontal sinus surgery and revision surgery), and more recently, IGS has facilitated the shift toward endoscopic management of the anterior skull base. Despite its prevalence, relatively little has been written about the principles of IGS for the practice of otorhinolaryngology. In *Image-Guided Surgery: Fundamental and Clinical Applications in Otolaryngology*, Labadie and Fitzpatrick help to fill this gap by providing a comprehensive view of IGS technology and its supporting principles with reference to otorhinolaryngologic procedures.

Labadie and Fitzpatrick start with a historical perspective and conclude with a look to the future. The main substance of the book is the description of the technology that drives IGS. The authors provide detailed explanations of the physics of CT and MRI scans. Subsequent chapters describe how the hardware of instrument tracking operates and then how the critical step of registration aligns preoperative imaging with intraoperative anatomy. Labadie and Fitzpatrick devote more than 20 pages to the assessment of IGS accuracy (better termed “target registration error,” or TRE, as they point out); this chapter should be required reading for any ENT surgeon who wishes to use IGS safely and effectively. Of course, the authors provide a summary of current clinical uses, including the data that support the use of IGS in the operating room. Labadie and Fitzpatrick also present a summary of currently available systems; unfortunately, the usefulness of this summary is likely to be limited as commercially available systems evolve over the next few years.

*Image Guided Surgery* is both well-written and well-illustrated. The subject matter is technically complex, but the authors provide clear explanations that clinicians should be able to understand. The illustrations demonstrate the concepts described in the text well. The concepts that make IGS feasible will not change, and it is likely that the chapters dedicated to these topics will remain relevant for many years. On the other hand, innovation in IGS systems has grown as recent Food and Drug Administration approvals permit the release of new and updated IGS systems, and other systems that are under development come to the market; chapters dedicated to describing commercially available systems are likely to lose their relevance quickly.

Overall, *Image-Guided Surgery* is an excellent reference for anyone with interest in IGS for otolaryngologic procedures. Trainees and novice surgeons will find the explanations of IGS useful, and experienced surgeons will develop a greater understanding of this critical technology by reading the book. Labadie and Fitzpatrick should be congratulated for a book that is a major contribution for otorhinolaryngology.