The new and emerging field of computational surgery will improve the efficiency and quality of surgery and will give patients access to very complex surgical operations that require extreme precision and minimum intrusion. In order to effectively deploy computational surgery techniques in life threatening cases such as inoperable cancer tumors that have invaded critical artery tissues or the nervous system, surgeons will have to become very familiar with computing methods, such as image analysis, augmented reality and robotics. Computational Surgery and Dual Training provides the necessary background in computer and surgical techniques that will enable computer scientists/biomedical engineers and surgeons to work together to improve interventional procedures and surgeries. The book brings together contributions from leading minds in the field, who also:

- Provide a foundation in surgical methods for biomedical engineers who wish to do research in the surgical area
- Include material on surgery applications and biomedical modeling
- Offer a detailed discussion of imaging and optimization in computational surgery

Computational Surgery and Dual Training is the perfect book for biomedical engineers and active surgeons interested in learning more about these developing methods.