Contents

1. Surgical Space and Equipment **1**

Lee M Miller, Vineet Mishra

- Types of Facilities *1*
- Accreditation *2*
- Laboratory Certification *2*
- Understanding the Market *2*
- Clinical Space *3*
- Leasing versus Owning *3*
- Equipment *4*
- Surgical Beds *4*
- Lighting *4*
- Smoke Management *4*
- Sterilization *6*
- Personnel *7*

2. Surgical Instruments **9**

Ashley G Rubin, Arisa E Ortiz, S Brian Jiang

- Scalpel Handles *9*
- Scalpel Blades *9*
- Needle Holders *10*
- Forceps *12*
- Scissors *13*
- Other Instruments *16*
- Nail Surgery Instruments *17*
- Surgical Tray *18*
- Safety *19*

3. Facial Anatomy **21**

Thomas D Griffin Jr, Mary Larijani, Ezra Hazan, Nazanin Saedi

- Surface Anatomy of the Face *21*
- Facial Innervation *27*

4. Preoperative Considerations **32**

Margaret W Mann, Megan Morrison, Scott Santilli, Aleta Simmons

- Anesthesia in Dermatologic Surgery *32*
- Antibiotic Prophylaxis in Dermatologic Surgery *40*
- Anticoagulation Management in Dermatologic Surgery *44*

5. Postoperative Considerations **52**
Anne Zhuang, S Brian Jiang
- Bandaging *52*
- Dressings and Bandages *53*

6. Suturing Techniques **59**
Robert Edwin Eilers Jr, Arisa E Ortiz, S Brian Jiang
- Loading the Needle *59*
- Handling the Needle and Suture *59*
- Handling the Tissue *59*
- The Simple Instrument Tie *59*
- Preoperative Considerations *60*
- Suture Techniques *62*

7. Flap Classification and Design/Biomechanics of Skin **72**
Andrew Breithaupt, Patrick K Lee
- Biomechanics of Skin Flaps *80*
- Flap Physiology *82*

8. Advancement Flaps **86**
Laura Kruter, Thomas Rohrer
- Flap Design and Considerations *86*
- Applications *94*

9. Rotation Flaps **96**
Tushar Dabade, Bichchau Michelle Nguyen
- Unilateral Rotation Flaps *96*
- Bilateral Rotation Flaps *100*

10. Transposition Flaps **104**
Jennifer Herrmann, Michelle Levender, Sarah Tuttleton Arron
- Types *104*
- Applications *110*

11. Staged Flaps **119**
Jesse M Lewin, John A Carucci

12. Skin, Cartilage, and Composite Grafts **147**
Syril Keena T Que, Omar A Ibrahimi
- Graft Types *147*

13. Combination Repairs **159**
Sailesh Konda, Swati Kannan, Suneel Chilukuri
- Nasofacial Sulcus *160*
- Cheek *161*
- Nose *162*
- Forehead *165*
- Ear *169*
- Chin *172*

14. Reconstruction of the Nose 174
Bassel H Mahmoud, Suzanne M Olbricht
- Instrumentation *176*
- Nasal Repair Options *176*
- Flap Reconstruction *181*
- Complications *188*

15. Eyelid and Periorbital Reconstruction 191
Ian A Maher, Joseph Kallini, Jeremy S Bordeaux
- Anatomy *191*
- Assessment of the Wound *193*
- Reconstruction of Anterior Lamellar Defects *193*
- Reconstruction of Full-Thickness Eyelid Defects *202*

16. Reconstruction of the Lip/Perioral 207
G Richard Nichols, T Minsue Chen, J Ramsey Mellette
- Reconstruction Planning *208*
- Location *209*

17. Reconstruction of the Cheek 251
Daniel Y Sugai, Daihung V Do
- Anatomy of the Cheek *251*

18. Forehead Reconstruction 269
Jennifer Herrmann, Consuelo V David, Lisa Chipps
- Reconstructive Planning *270*
- Reconstruction by Location *273*

19. Reconstruction of the Ear 287
Robert Egbers Jr, Sarah M Sung, Timothy Wang
- Auricular Architecture *288*
- Ear Reconstruction *289*

20. Reconstruction of the Scalp 295
Brian Hibler, Anthony M Rossi, Kishwer S Nehal
- Anatomy *295*
- Reconstruction Planning: Basic Tenets *297*
- Reconstruction Planning: Methods of Closure *299*
- Complications and Postoperative Care *314*

21. Reconstruction of the Hand/Nail 317
Joseph F Sobanko, Christopher J Miller
- Anatomy Overview *317*
- Planning Reconstruction *323*
- Digital Reconstruction *332*
- Postoperative Wound Care *341*

22. Scar Revision 344
Steven Chow, Richard G Bennett
- Scar Assessment *344*

- Time to Revise a Scar *344*
- Fusiform Excision *344*
- Trapdoor Deformity Repair *345*
- Z-Plasty *346*
- Running W-Plasty *348*
- V-to-Y Advancement Flap *350*

23. Scar Refinement **353**

Anne Marie Tremaine, Arisa E Ortiz, Mathew M Avram

- Prevention *353*
- Laser Treatments *354*
- Dermabrasion *358*
- Subcision *359*
- Intralesional Injections *359*
- Pressure *359*
- Radiation *359*
- Re-Excision *360*
- Other Modalities *360*

24. Complications **363**

Brienne Cressey, Murad Alam, Kira Minkis

- Complications of Local Anesthesia: Lidocaine Toxicity *363*
- Bleeding/Hemorrhage Complications *364*
- Infectious Complications *366*
- Wound Failure and Tissue Ischemia Complications *372*
- Complications by Anatomic Location *375*
- Emergencies in Dermatologic Surgery *375*
- Motor Nerve Transection *376*

Index *381*