# Contents

## Part I  Teaching and Learning Anatomy

1. **Elements of Successful Adult Learning**
   Lap Ki Chan and Miriam Uhlmann
   
2. **Learners of a New Generation**
   Camille DiLullo
   
3. **Learning Styles in Anatomy Teaching and Learning**
   Barry S. Mitchell
   
4. **Constructive Alignment: An Outcomes-Based Approach to Teaching Anatomy**
   John Biggs and Catherine Tang
   
5. **Competencies for Teaching Anatomy Effectively and Efficiently**
   John F. Morris
   
6. **Using Teaching Assistants in Anatomy**
   Darrell J.R. Evans
   
7. **Engaging Residents and Clinical Faculty in Anatomy Education**
   Jennifer M. McBride and Richard L. Drake

## Part II  Teaching in Large Group Settings

8. **Giving a Lecture**
   Lap Ki Chan
   
9. **Preparing and Recording Lectures for Online Delivery**
   Thierry R.H. Bacro
   
10. **Evaluating Your Own Performance in a Lecture**
    John Dent
    
11. **Choosing Between Lecture and Briefing Sessions**
    Nirusha Lachman and Wojciech Pawlina

xiii
Part III  Teaching in Small Group Settings

12  Facilitating Small Group Discussion ......................................................... 99
    Boon Huat Bay and Samuel Sam Wah Tay

13  Applying Learning Styles to Engage a Diversity of Learners and Behavioral Problems in Anatomy Education ....................................................... 107
    Mark Terrell

14  Teaching and Learning Anatomy in a PBL Curriculum .............................. 115
    Esther M. Bergman

15  Learning and Teaching Anatomy Through Case-Based Learning (CBL) ...... 125
    Jill E. Thistlethwaite

16  Team-Based Learning: An Effective Pedagogical Strategy to Teach Anatomy .................................................. 133
    Cheryl Melovitz-Vasan, Grace Pinhal-Enfield, David O. DeFouw, and Nagaswami S. Vasan

17  Giving Feedback to Students .................................................................... 143
    Nirusha Lachman

18  Using Body Painting and Other Art-Based Approaches to Teach Anatomy ........................................................................... 155
    Gabrielle M. Finn

19  Evaluating Your Own Performance in Leading a Small Group Discussion ........................................................................... 165
    Jon Cornwall

Part IV  In the Gross Anatomy Laboratory

20  Running a Body Donation Program .............................................................. 175
    Andrea Porzionato, Veronica Macchi, Carla Stecco, and Raffaele De Caro

21  Designing Gross Anatomy Laboratory to Meet the Needs of Today’s Learner ........................................................................... 185
    Quentont Wessels, Willie Vorster, and Christian Jacobson

22  Preparing Students Emotionally for the Human Dissection Experience ........................................................................... 195
    Anja Böckers

23  Promoting Reflection in the Laboratory ...................................................... 203
    Lap Ki Chan
24 Teaching Anatomy: Prosections and Dissections ....................... 213
Nalini Pather

25 Use of Unembalmed/Fresh Cadavers in Anatomy Teaching ........................................ 223
Jennifer M. McBride and Richard L. Drake

26 Facilities and Instruments for Learning in the Gross Anatomy Laboratory ................................................ 227
Joy S. Reidenberg and Jeffrey T. Laitman

Part V Teaching Tools

27 Role of Image and Cognitive Load in Anatomical Multimedia ........................................ 237
Timothy D. Wilson

28 Essential E-Learning and M-Learning Methods for Teaching Anatomy ........................................ 247
Robert B. Trelease

29 The Use of Low-Tech Models to Enhance the Learning of Anatomy ........................................ 259
Lap Ki Chan

30 The Use of Medical School Museums in Teaching “Anatomy” Within an Integrated Medical Curriculum ........................................ 267
Yehia M.A-H. Marreez and Luuk N.A. Willems

Part VI Assessment

31 Assessing Anatomy as a Basic Medical Science ........................................ 279
Dujeepa D. Samarasekera, Ponnampalam Gopalakrishnakone, and Matthew C.E. Gwee

32 Developing Multiple-Choice Questions for Anatomy Examinations ........................................ 291
Thomas R. Gest and Webster Francois

33 Peer and Faculty Assessment of Nontraditional Discipline-Independent Skills in Gross Anatomy ........................................ 299
Nirusha Lachman and Wojciech Pawlina

Part VII Curriculum Design

34 Anatomy Education in an Innovative Medical School Curriculum ........................................ 313
Jennifer M. McBride and Richard L. Drake
35  The Role of the Anatomist in Teaching of Nontraditional Discipline-Independent Skills ...................................................... 319
   Darrell J.R. Evans and Wojciech Pawlina

36  Role of Anatomists in Building an Integrated Medical Curriculum ................................................................. 331
   Douglas F. Paulsen, Brenda J. Klement,
   and Lawrence E. Wineski

37  The Hidden Curriculum and Anatomy Education .................... 339
   Frederic W. Hafferty and Gabrielle M. Finn

Part VIII  Teaching Anatomy to Students in Different Academic Programs

38  Teaching Anatomical Sciences to Dental Students .................. 353
   Stephen McHanwell

39  Negotiation and Assessment as Tools for Tailoring Anatomy Courses to Allied Health Programs ................................................. 363
   Lawrence J. Rizzolo, William B. Stewart,
   Alexandria Garino, and Linda H. Pellico

40  Teaching Anatomy to Students in a Physical Therapy Education Program ................................................................. 373
   James W. Youdas, David A. Krause, and Nathan J. Hellyer

Part IX  Educational Research

41  Research Methods in Anatomy Education .................................. 383
   Zubair Amin and Hamza Mohammad Abdulghani

42  Scholarship of Teaching and Learning in Anatomy .................. 391
   Valerie Dean O’Loughlin

Index....................................................................................................... 399