



---

THE PODIATRY INSTITUTE

# UPDATE 2017

---

*The Proceedings of the Annual Meeting  
of the Podiatry Institute*

## 2017 CORPORATE SPONSORS

*Special thanks for their outstanding support of The Podiatry Institute  
and the continued development of excellence in post-graduate continuing education.  
Please support these companies that support your profession.*

### PLATINUM

BAKO INTEGRATED PHYSICIAN SOLUTIONS

PICA

STRYKER FOOT & ANKLE

### GOLD

AMERX HEALTH CARE

ARTHROSURFACE

MARLINZ PHARMACEUTICALS

VALEANT PHARMACEUTICALS

### SILVER

DELTA SURGICAL INSTRUMENTS

IN2BONES USA

THE TETRA CORPORATION

### BRONZE

DIA-FOOT

REDI-THOTICS

WRIGHT MEDICAL

# CONTRIBUTORS

## **Tee Adeleke, DPM**

*Fellow, American Foundation of Lower Extremity Surgery and Research, Alamogordo, New Mexico*

## **Ugo Adigweme, DPM**

*Second-Year Resident, Westchester General Hospital, Miami, Florida*

## **David C. Alder, DPM**

*Private Practice, Decatur, Georgia  
Former Residency Director, DeKalb Medical, Decatur, Georgia  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

## **Nicholas Amalfetano, DPM**

*First-Year Resident, Aria-Jefferson Health, Philadelphia, Pennsylvania*

## **J. Joseph Anderson, DPM**

*Fellowship Director, American Foundation of Lower Extremity Surgery and Research, Alamogordo, New Mexico  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

## **Elizabeth Ansert**

*Second-Year Student, Barry University School of Podiatric Medicine, Miami, Florida*

## **Robert W. Appling**

*Fourth-Year Student, Barry University School of Podiatric Medicine, Miami, Florida*

## **Brian Asencio, DPM**

*First-Year Resident, Mount Sinai Medical Center, Miami Beach, Florida*

## **Jannah F. Bacchus, DPM**

*First-Year Resident, Northport Veteran's Affairs Medical Center Residency Program, Northport, New York*

## **Hani Badahdah, DPM, MD, CWSP, MS**

*Fellow, Reconstructive Foot & Ankle Surgery at University of Texas Health Science Center, San Antonio, Texas*

## **Trevor Baddaloo, MS**

*Fourth-Year Student, Barry University School of Podiatric Medicine, Miami, Florida*

## **Adam M. Bressler, MD**

*Partner, Infectious Disease Specialists of Atlanta  
Medical Director of Microbiology, Infection Prevention, and Antibiotic Stewardship, DeKalb Medical, Decatur, Georgia*

## **Jacqueline Brill, DPM**

*Associate Professor, Barry University School of Podiatric Medicine, Miami, Florida  
Residency Director, Mount Sinai Medical Center, Miami Beach, Florida  
Fellow, American College of Foot and Ankle Surgeons*

## **Jacqueline Saxe Buchman, DPM**

*Associate Professor, Barry University School of Podiatric Medicine, Miami, Florida*

## **Mario Cala, DPM**

*Assistant Professor, Barry University School of Podiatric Medicine, Miami, Florida  
Residency Director, Jackson North Hospital, Miami, Florida*

## **Brian Carpenter, DPM**

*Professor, University of North Texas Health Science Center, Fort Worth, Texas  
Surgeon, John Peter Smith Hospital, Department of Orthopaedics, Fort Worth, Texas  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

## **Harold Cesar, DPM**

*Private Practice, Jacksonville, Florida  
Chief Section Chair of Podiatry, St. Vincent Medical Center, Riverside, Florida*

## **Carly Chapman, DPM**

*Third-Year Resident, Atlanta VAMC, Decatur, Georgia*

## **Devin W. Collins, BA**

*Fourth-Year Student, Nova Southeastern University, Fort Lauderdale, Florida*

## **Cayla Conway, DPM**

*Third-Year Resident, DeKalb Medical, Decatur, Georgia*

## **Charles Cook, MD**

*Private Practice, The Center for Foot and Ankle Restoration, Dallas, Texas  
Fellow, American Academy of Orthopaedic Surgeons*

## **Corine L. Creech, DPM**

*Private Practice, Lake Ridge, Virginia*

## **Cherison A. Cuffy, DPM, CWS**

*Assistant Professor, Barry School of Podiatric Medicine, Miami, Florida*

## **John Davidson, DPM**

*Second-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

## **William T. DeCarbo, DPM**

*St. Clair Orthopedic Associates, Pittsburgh, Pennsylvania  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

## **Kevin Doulens, MD**

*Staff, Ochsner Medical Center, Slidell, Louisiana  
Fellow, American Academy of Orthopaedic Surgeons*

**Michael D. Dujela, DPM**

*Washington Orthopaedic Center, Centralia, Washington  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

**Mark B. Ellis, DPM**

*Surgical Attending, VAMC, Salt Lake City, Utah  
Research Coordinator, Intermountain Healthcare Residency,  
Salt Lake City, Utah  
Associate, American College of Foot and Ankle Surgeons*

**Mohanad Eltahir, DPM**

*Private Practice, Mercy Hospital, Miami, Florida*

**Norman Espinosa, MD**

*Universitätsklinik Balgriz, Zürich, Switzerland*

**Kent Feldman, DPM**

*Private Practice, San Diego, California  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

**William D. Fishco, DPM**

*Private Practice, Anthem, Arizona  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Jesus Garcia, DPM**

*First-Year Resident, Mercy Hospital, Miami, Florida*

**Matrona Giakoumis, DPM**

*Surgical Instructor, Surgery Department, New York College  
of Podiatric Medicine, New York, New York  
Associate, American College of Foot and Ankle Surgeons  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Alejandro Gonzalez, DPM**

*Third-Year Resident, Jackson North Medical Center, Miami, Florida*

**Jose M. Gonzalez, DPM**

*Third-Year Resident, DeKalb Medical, Decatur, Georgia*

**Donald Green, DPM**

*Director of Podiatric Residency Training, Scripps Mercy Hospital,  
San Diego, California  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Mack Jay Groves IV, DPM**

*Private Practice, Covington, Louisiana  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Amir Hajimirsadeghi, DPM**

*Scripps Mercy and Kaiser Permanente Hospitals, San Diego  
& Sacramento, California  
Sharp Rees-Stealy Medical Group, San Diego, California*

**Patrick B. Hall, DPM**

*Private Practice, Baton Rouge, Louisiana  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Samuel Hammer-Nahman, DPM**

*Second-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**Myron Holbert Hansen, DPM**

*Private Practice, Chandler, Arizona  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

**Pamela Hong, DPM**

*Third-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**John Houseworth, DPM**

*Assistant Professor, Barry University School of Podiatric  
Medicine, Miami, Florida*

**Christopher F. Hyer, DPM, MS**

*Orthopedic Foot and Ankle Center, Westerville, Ohio  
Fellow, American College of Foot and Ankle Surgeons*

**Hamed Jafary, DPM**

*Second-Year Resident, Jackson North Medical Center, Miami, Florida*

**A. Louis Jimenez, DPM**

*Private Practice, Snellville, Georgia  
Program Director, Atlanta VAMC Podiatric Residency Program  
Past President, American College of Foot and Ankle Surgeons  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Kyle Johnson**

*Fourth-Year Student, Barry University School of Podiatric  
Medicine, Miami, Florida*

**Carl A. Kihm, DPM**

*Private Practice, Louisville, Kentucky  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Kevin Lam, DPM, DABLES, DABFAS**

*Fellowship Director, Advanced Reconstructive Rearfoot Ankle  
Surgery, Naples, Florida  
Fellow, American College of Foot and Ankle Surgeons*

**David R. Larson, DPM**

*Orthopedic Foot and Ankle Center, Westerville, Ohio*

**Joshua Jae Lee, DPM**

*Second-Year Resident, DeKalb Medical, Decatur, Georgia*

**Sara E. Lewis, DPM**

*Second-Year Resident, DeKalb Medical, Decatur, Georgia*

**Jessica A. Lickiss, DPM**

*Private Practice, Falls Church, Virginia*

**Raymond J. Lopez, DPM**

*First-Year Resident, Mount Sinai Medical Center, Miami  
Beach, Florida*

**James Losito, DPM**

*Professor and Sports Medicine Fellowship Director, Barry University  
School of Podiatric Medicine, Miami, Florida  
Fellow, American College of Foot and Ankle Surgeons*

**Kevin Y. Lu, DPM**

*Third-Year Resident, DeKalb Medical, Decatur, Georgia*

**Kieran T. Mahan, DPM**

*Clinical Professor, Department of Podiatric Surgery, Temple University  
School of Podiatric Medicine, Philadelphia, Pennsylvania  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Podiatric Medicine  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Sara Mahmood, BS**

*Fourth-Year Student, Barry University School of Podiatric  
Medicine, Miami, Florida*

**Joshua J. Mann, DPM**

*Private Practice, Jonesboro, Georgia  
Associate, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Podiatric Medicine  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Christopher Martin, DPM**

*Second-Year Resident, DeKalb Medical, Decatur, Georgia*

**Michael C. McGlamry, DPM**

*Private Practice, Cumming, Georgia  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Natalie Mendez, DPM**

*First-Year Resident, Mercy Hospital, Miami, Florida*

**Thomas Merrill, DPM**

*Professor of Surgery, Barry University School of Podiatric  
Medicine, Miami, Florida  
Residency Director, Mercy Hospital, Miami, Florida  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Andrew J. Meyr, DPM**

*Clinical Associate Professor, Department of Podiatric Surgery,  
Temple University School of Podiatric Medicine,  
Philadelphia, Pennsylvania*

**Nenad Milanovic, DPM**

*Second-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**Travis Motley, DPM, MS**

*Professor, University of North Texas Health Science Center,  
Fort Worth, Texas  
Surgeon, John Peter Smith Hospital, Department of  
Orthopaedics, Fort Worth, Texas  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

**Jasmine N. Neal, DPM**

*Third-Year Resident, DeKalb Medical, Decatur, Georgia*

**Christine K. Nolan, DPM**

*Susquehanna Health System, Susquehanna, Pennsylvania*

**Paula Nuguid, DPM**

*Second-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**Robert G. O'Keefe, DPM**

*Private Practice, Des Plaines, Illinois  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

**Abiola J. Oki, DPM**

*Second-Year Resident, Mercy Hospital, Miami, Florida*

**Rikhil Patel, DPM**

*Fellow, Advanced Reconstructive Rearfoot Ankle Surgery,  
Naples, Florida*

**Sohan P. Patel, DPM**

*Second-Year Resident, Northwest Medical Center, Margate, Florida*

**Sofie L. Pinney, DPM, MS**

*Private Practice, Pikeville, Kentucky  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Alayna Puccinelli, DPM**

*Third-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**Ralph Ramos, DPM**

*Second-Year Resident, Mercy Hospital, Miami, Florida*

**Brittany Rice, DPM**

*Second-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**George Rivello, DPM**

*Private Practice, San Diego, California  
Fellow, American College of Foot and Ankle Surgeons*

**Jay D. Ryan, DPM**

*Private Practice, Fairfax, Virginia  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Gabriel Santamarina, DPM**

*Third-Year Resident, Mercy Hospital, Miami, Florida*

**Vilayvanh Saysoukha, DPM, MSc**

*Second-Year Resident, Northwest Medical Center, Margate, Florida*

**Naim Shaheed, DPM**

*Private Practice, Lithonia, Georgia  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Derek Smith, DPM**

*Scripps Mercy and Kaiser Permanente Hospitals, San Diego and  
Sacramento, California*

**Robert J. Snyder, DPM, CWS, MSc**

*Professor, Barry School of Podiatric Medicine, Miami, Florida*

**Spenser Soldano**

*Third-Year Student, Barry University School of Podiatric  
Medicine, Miami, Florida*



**Charles C. Southerland Jr., DPM, DABPM, CWS,  
DABDA, FACPAP**

*Professor, Barry University School of Podiatric Medicine,  
Miami, Florida  
Fellow, American College of Foot and Ankle Surgeons*

**Mickey Stapp, DPM**

*Private Practice, Augusta, Georgia  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Alexandria Stern, DPM**

*Third-Year Resident, Scripps Mercy-Kaiser Residency Program  
Scripps Mercy Hospital, San Diego, California*

**Zflan Swayzee, BS**

*Research Assistant, American Foundation of Lower Extremity Surgery  
and Research, Alamogordo, New Mexico*

**H. Thomas Temple, MD**

*Orthopedic Surgery, Musculoskeletal Oncology,  
Nova Southeastern University, Department of Orthopedic Surgery,  
Fort Lauderdale, Florida  
Center for Orthopedic Innovations, Mercy Hospital, Miami, Florida*

**John V. Vanore, DPM**

*Private Practice, Gadsden, Alabama  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Jill Waalen, MD, MPH**

*Associate Professor, The Scripps Research Institute, La Jolla, California  
Clinical Biostatistics Consultant and Instructor at the Scripps  
Translational Research Institute, La Jolla, California  
Diplomate, American Board of Preventive Medicine  
Fellow, American College of Preventive Medicine*

**Matthew R. Wagoner, DPM**

*Triad Foot Center, Greensboro, North Carolina*

**Jeffrey S. Weber, DPM**

*Orthopedic Foot and Ankle Center, Westerville, Ohio*

**Robert B. Weinstein, DPM**

*Private Practice, Fayetteville, Georgia  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery  
Faculty, The Podiatry Institute, Decatur, Georgia*

**Philip Wrotslavsky, DPM**

*Director, Advanced Foot and Ankle Center, San Diego, California  
Fellow, American College of Foot and Ankle Surgeons  
Diplomate, American Board of Foot and Ankle Surgery*

# CONTENTS

## SECTION ONE

### Hallux Valgus and Forefoot Surgery

<u>Chapter</u>	<u>Page</u>
1 / Modifications of the Pan Metatarsal Head Resection for Increased Postoperative Stability <i>David C. Alder</i>	1
2 / Minimally Invasive Bunionectomy: The Lam Modification of the Traditional Distal First Metatarsal Osteotomy Bunionectomy <i>Kevin Lam, Rikhil Patel, Thomas Merrill</i>	3
3 / Plantar Incision Approach for Hammertoe Correction <i>Jacqueline Brill, Raymond J. Lopez, Brian Asencio, Thomas Merrill</i>	9
4 / Conversion of a Failed First Metatarsophalangeal Joint Arthrodesis to a Dual Stem Silastic Total Joint Implant: A Case Report <i>John Davidson, Amir Hajimirsadeghi, Derek Smith</i>	13
5 / Weight-Bearing Computed Tomography Evaluation of First Metatarsal Frontal Plane Rotation in Hallux Abducto Valgus Deformity <i>Alayna Puccinelli, Kent Feldman, Donald Green, Jill Waalen</i>	17
6 / “Problematic” Implant or Complications of First Metatarsophalangeal Joint Implant Arthroplasty – 2.0 <i>John V. Vanore, Robert G. O’Keefe</i>	23
7 / Compression Staples for Transverse Metaphyseal First Metatarsal Base Wedge Osteotomy <i>Paula Nuguid, Donald R. Green</i>	33

  

## SECTION TWO

### Rearfoot and Ankle

8 / Bilateral Adult Cavoadductovarus Deformity: Literature Review and Case Presentation <i>Carly Chapman, A. Louis Jimenez</i>	37
9 / Posterior Incision for Subtalar Arthrodesis <i>Patrick B. Hall</i>	43

## SECTION THREE

### Medicine

<u>Chapter</u>	<u>Page</u>
10 / Stingray Spine Envenomation Impalement in the Foot: A Case Report <i>Nicholas Amalfetano, Gabriel Santamarina, Mario Cala, Thomas Merrill</i>	45
11 / Forensic Podiatry: A Brief Compendium <i>Elizabeth Ansert, Gabriel Santamarina, John Houseworth, Thomas Merrill</i>	47
12 / Management of a Recurrent Metastatic Renal Cell Carcinoma to the Foot With Medial Column Reconstruction: A Case Study <i>H. Thomas Temple, Mohanad Eltahir, Jannah F. Bacchus, Thomas Merrill</i>	53
13 / Risk of Infection and Disease Transmission with Allogenic Bone Graft Use in Foot and Ankle Surgery <i>Corine L. Creech, Christine K. Nolan, Matthew R. Wagoner, Kieran T. Mahan, Andrew J. Meyr</i>	59
14 / Factitious Disorder Imposed on Self <i>Jose M. Gonzalez</i>	63
15 / Are You Prepared? Office Emergencies <i>Joshua J. Mann</i>	65
16 / Acral Lentiginous Melanoma: A Case Presentation <i>Jacqueline Saxe Buchman, Spenser Soldano, Thomas Merrill</i>	69
17 / Comprehensive Care and Management of Foot Infection in an Immunocompromised Patient: A Case Report <i>Cherison A. Cuffy, Sohan P. Patel, Vilayvanh Saysoukha, Robert J. Snyder, Thomas Merrill</i>	73
18 / Levamisole-Induced Vasculitis Affecting the Lower Extremity From Contaminated Cocaine <i>Mark B. Ellis, William D. Fishco</i>	81
19 / An Update on the Literature for Foot And Ankle Surgery 2016: Are We Practicing Evidence-Based Medicine? <i>Matrona Giakoumis</i>	85

<b>Chapter</b>	<b>Page</b>
20 / Malignant Melanoma Management and Long-Term Follow-Up in Five Feet <i>Pamela Hong, George Rivello, Donald Green</i>	89
21 / Systemic Steroids in Podiatric Medicine <i>Mickey Stapp</i>	95
22 / Update on Hemoglobin A1c <i>Joshua Jae Lee</i>	99
23 / Bacterial Soft Tissue Infections Following Water Exposure <i>Sara E. Lewis, Devin W. Collins, Adam M. Bressler</i>	101
24 / Common Snake and Insect Bites in Georgia <i>Christopher Martin</i>	105

## **SECTION FOUR**

### **New Techniques and Technologies**

25 / Reverse Peroneus Brevis Muscle Flap for Dorsal Foot Wound Coverage: A Case Study <i>Mario Cala, Hamed Jafary, Alejandro Gonzalez, Thomas Merrill</i>	109
26 / Charcot Neuroarthropathy Reconstruction Using External Fixation: A Long-Term Follow-Up <i>Trevor Baddaloo, Natalie Mendez, Ralph Ramos, Mario Cala, Thomas Merrill</i>	115
27 / Tibiocalcaneal Arthrodesis as a Limb Salvage Solution for a Patient With Rearfoot Charcot Neuroarthropathy and Avascular Necrosis of the Talus <i>Ugo Adigweme, Abiola J. Oki, Kyle Johnson, Trevor Baddaloo, Mario Cala, Thomas Merrill</i>	121
28 / Human Amniotic Allograft Used on Talar Dome Lesions: A Comparative Study <i>J. Joseph Anderson, Zflan Swayzee, Myron Holbert Hansen, Alexandria Stern</i>	126
29 / Preload Arthrodesis Technique: A Corrected Position, Bone-Preserving, and Realigning Procedure <i>Mack Jay Groves, IV</i>	131
30 / Evolution of Total Ankle Replacement Within the US <i>Michael D. Dujela, William T. DeCarbo, Norman Espinosa, Jeffrey S. Weber, David R. Larson, Christopher F. Hyer</i>	139

<b>Chapter</b>	<b>Page</b>
31 / Tendon Orthobiology <i>Jasmine N. Neal</i>	150
32 / Surgical Treatment of Peroneus Brevis Tendon Repair With and Without Human Amniotic Allograft: A Comparison Study <i>J. Joseph Anderson, Tee Adeleke, Brittany Rice, Zflan Swayzee</i>	152
33 / Peroneal Treatment Options Following Failed Tenodesis: Two Staged Hunter Rod Technique <i>Sofie L. Pinney</i>	157
34 / Application of Placental Membrane Graft in Management of Recalcitrant Venous Ulcer: A Case Report <i>Hani Badahdah, Sara Mahmood, Jesus Garcia, James Losito, Thomas Merrill</i>	162
35 / A Rare Case of Cuboid-Navicular Coalition in a Nine-Year-Old Girl <i>Nenad Milanovic, Pamela Hong, George Rivello, Donald Green</i>	166
36 / Framework for Understanding Medical Device Development <i>Robert B. Weinstein</i>	169
37 / Medial and Lateral Column Beaming: A Literature Review <i>Cayla Conway, Naim Shaheed</i>	173

## **SECTION FIVE**

### **Trauma**

38 / Calcaneal Fracture Management Via a Combination of Approaches: Double External Fixation Distraction With Minimally-Invasive and Percutaneous Repair <i>Carl A. Kihm</i>	176
39 / Multiple Foot Fractures Treated With Multiple Minirail External Fixation: A Case Report <i>Hamed Jafary, Ralph Ramos, Cherison A. Cuffy, Thomas Merrill</i>	183
40 / Combined Reconstruction of the Deltoid and Spring Ligament Complex in an Acute Ligamentous Injury <i>Samuel Hammer-Nahman, Philip Wrotslavsky</i>	192



<b><u>Chapter</u></b>	<b><u>Page</u></b>
41 / Management of Traumatic Wounds to Lower Limbs Resulting From Projectiles of Various Eras <i>Charles C. Southerland, Jr., Robert W. Appling, Thomas Merrill</i>	198
42 / Minimally Invasive Open Reduction Internal Fixation of Calcaneus Fractures With Plate Fixation: A Five-Year Follow-Up Analysis <i>Brian Carpenter, Harold Cesar, Travis Motley</i>	204
43 / Restoration of Lateral Ankle Stability With Augmentation: Two Variations and Results <i>Brian Carpenter, Kevin Doulens, Charles Cook</i>	208

<b><u>Chapter</u></b>	<b><u>Page</u></b>
44 / Local Infiltration Analgesia Techniques for Closed Reduction of Ankle Fractures <i>Kevin Y. Lu</i>	213
45 / Posterior Malleolar Fractures <i>Jessica A. Lickiss, Jay D. Ryan</i>	217
<b>SECTION SIX</b>	
<b>PICA Risk Management</b>	
46 / The Podiatrist's Role in Pain Management <i>Michael C. McGlamry</i>	221