

CURRICULUM VITAE

Name: **RANDALL EVAN MARCUS, M.D.**
Charles H. Herndon Professor and Chairman
Department of Orthopaedic Surgery

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EDUCATION

The Metairie Park Country Day School, New Orleans, Louisiana - Graduate 1968

Tulane University, New Orleans, Louisiana - B.S. (Magna Cum Laude) with honors in Biochemistry (Phi Beta Kappa) 1972

Louisiana State University School of Medicine, New Orleans, Louisiana - M.D. (Sigma Xi) 1975

Case Western Reserve University School of Medicine, Cleveland, Ohio - Surgical Internship 1975 - 1976

Case Western Reserve University School of Medicine, Cleveland, Ohio - Assistant Resident in General Surgery 1976 - 1977

Case Western Reserve University School of Medicine, Cleveland, Ohio - Resident in Orthopaedics 1977 - 1979

Case Western Reserve University School of Medicine, Cleveland, Ohio - Chief Resident in Orthopaedics 1979 - 1980

Oxford University, Oxford, England - Fellow, Nuffield Department of Orthopaedic Surgery 1980 - 1981

University of Basle, Basle, Switzerland - A. O. International Fellow, Department of Surgery (Prof. - Dr. M. Allgöwer) 1981

University of Washington, Seattle, Washington - Senior Fellow, Department of Orthopaedics, Harborview Medical Center 1981

ACADEMIC APPOINTMENTS

Post-Doctoral Fellow in Surgery, Case Western Reserve University School of Medicine, 1975 - 1977

Post-Doctoral Fellow in Orthopaedics, Case Western Reserve University School of Medicine, 1977 - 1980

Fellow, Nuffield Department of Orthopaedics, Oxford University, 1980 - 1981

Senior Fellow, Department of Orthopaedics, University of Washington, 1981

Instructor in Orthopaedic Surgery, Case Western Reserve University School of Medicine, 1981 - 1982

Assistant Professor of Orthopaedic Surgery, Case Western Reserve University School of Medicine, 1982 - 1983

Assistant Clinical Professor of Orthopaedic Surgery, Tulane University School of Medicine, 1984 - 1985

Assistant Clinical Professor of Orthopaedic Surgery, Louisiana State University School of Medicine, 1984 - 1985

Assistant Professor of Orthopaedic Surgery, Case Western Reserve University School of Medicine, 1986 - 1991

Director, Division of Foot and Ankle Surgery, Department of Orthopaedics, Case Western Reserve University School of Medicine, 1987

Associate Professor of Orthopaedic Surgery, Case Western Reserve University School of Medicine, 1992 - 1997

Professor of Orthopaedic Surgery, Case Western Reserve University School of Medicine, 1998 - present

Charles H. Herndon Professor and Chairman, Case Western Reserve University School of Medicine, 2003 - present

HOSPITAL APPOINTMENTS

Attending Orthopaedic Surgeon, University Hospitals Case Medical Center, Cleveland, Ohio, 1981 - 1983

Director, Division of Orthopaedic Trauma, University Hospitals Case Medical Center, Cleveland, Ohio, 1981 - 1983

Attending Orthopaedic Surgeon, The Touro Infirmary, New Orleans, Louisiana, 1984 - 1985

Attending Orthopaedic Surgeon, University Hospitals Case Medical Center, Cleveland, Ohio, 1986 - present

Consultant Orthopaedic Surgeon, Veterans Administration Hospital, Cleveland, Ohio, 1986 - present (Clinical Director, Regional Prosthetic Amputee Clinic, 1989 - 2003)

Director, Division of Foot and Ankle Surgery, University Hospitals Case Medical Center, Cleveland, Ohio, 1986 - present

Chairman, Department of Orthopaedic Surgery, University Hospitals Case Medical Center, Cleveland, Ohio, 2003 - present

BOARD CERTIFICATION

Diplomate, American Board of Orthopaedic Surgery, 1982

Recertification, American Board of Orthopaedic Surgery, 1996

Recertification, American Board of Orthopaedic Surgery, 2007

LICENSURE TO PRACTICE MEDICINE

Ohio - 1976

MEMBERSHIP IN PROFESSIONAL SOCIETIES (BY ELECTION)

National and International

Fellow, American College of Surgeons, 1984

Fellow, American Academy of Orthopaedic Surgeons, 1984

Orthopaedic Trauma Association, 1986

Société Internationale de Chirurgie Orthopaedique et de Traumatologie (SICOT), 1991

American Orthopaedic Foot and Ankle Society, 1992

Association of Bone and Joint Surgeons, 1996

American Orthopaedic Association, 2000

Twentieth Century Orthopaedic Society, 2005

Local

Cleveland Orthopaedic Society, 1981 (Board of Directors 1986 - 1989)

Innominatum Medical Society of Cleveland, 1986

(Board of Directors 1988 - 1993)

(Secretary-Treasurer 1988 - 1990)

(President 1990 - 1991)

Cleveland Aesculapian Medical Society, 1986

(Board of Directors 1991 - 1995)

(President 1993 - 1994)

The Pasteur Club of Cleveland, 1991

(Board of Directors 2001 -)

(Secretary-Treasurer 2002 - 2003)

(President 2003 - 2004)

NATIONAL APPOINTMENTS AND COMMITTEES

American Board of Orthopaedic Surgery, Written Examination Committee Question-Writing Task Force, 1983 - present

American Board of Orthopaedic Surgery, Written Recertification Examination Question-Writing Task Force, 1991 - 1992

American Board of Orthopaedic Surgery, Written Recertification Examination Standard Setting Task Force, 1996

American Board of Orthopaedic Surgery, Recertification Examination Adult Reconstruction Question-Writing Task Force, 1996 - present

Orthopaedic Trauma Association Archives Committee, 1997 - 2000

Association of Bone and Joint Surgeons, Marshall Urist/Nicolas Andry Awards Committee, 1999 - 2002; Chairman, 2002 - 2003

National Board of Medical Examiners, United States Medical Licensing Examination (USMLE) Orthopaedic Surgery Task Force, 2000 - 2001

American Board of Orthopaedic Surgery, Director Elect, 2001 - 2002

American Board of Orthopaedic Surgery, Board of Directors, 2002 - present

American Board of Orthopaedic Surgery, Written Examination Committee, 2002 - present; Chairman, 2003 - 2007

American Board of Orthopaedic Surgery, Maintenance of Certification Committee, 2002 - present

American Orthopaedic Association / Orthopaedic Research Society, Shands Lecture Award Committee, 2002 - 2005

Association of Bone and Joint Surgeons, Finance Committee, 2003 - 2007

American Orthopaedic Association, Nominating Committee, 2004 - 2005

Association of Bone and Joint Surgeons, 2nd Vice President, 2005 - 2006

Association of Bone and Joint Surgeons, 1st Vice President, 2006 - 2007

American Board of Orthopaedic Surgery, President Elect, 2006 - 2007

Association of Bone and Joint Surgeons, President, 2007 - present

American Board of Orthopaedic Surgery, President, 2007 - present

REGIONAL AND LOCAL APPOINTMENTS AND COMMITTEES

University Orthopaedic Associates Inc. - Board of Directors, 1992 - 2005; President, 2002 - 2005

American Red Cross of Northern Ohio - Medical Advisory Board, 1992 - 2000

Cleveland Health Museum - Board of Directors, 1992 - 1997; Advisory Board, 1998 - 2006

Cleveland Zoological Society - Board of Directors, 2000 - present

University Hospitals Professionals Limited - Director of Orthopaedics, 2005 - 2006

CASE SCHOOL OF MEDICINE AND UNIVERSITY HOSPITALS CASE MEDICAL CENTER COMMITTEES

Case School of Medicine Comprehensive Exam Committee, 1986 - 1989

University Hospitals Case Medical Center Autologous Blood Transfusion Committee (Chairman), 1992 - 1996

University Hospitals Case Medical Center Preadmission Testing Committee, 1994 - 1996

3. Principal Investigator – Metabolic Response of Muscle and Bone to Skeletal Trauma: Effect of Internal Fixation and Early Mobilization
Research Fund of 1942 - University Hospitals
\$18,000 1986
4. Principal Investigator – Ceramic Endoprosthesis Implant Study
Smith & Nephew Richards Grant
\$60,000 1990-1993
5. Principal Investigator – Hematocrit and Coagulation Following Joint Replacement
OrthoBiotech Grant \$2,500 1992
6. Principal Investigator – Open Label Randomized, Parallel Group Study Comparing the Pre-Operative Administration of Epoetin Alpha to the Standard of Care in Blood Conservation (Autologous Predeposit) in Primary Total Knee Reconstruction
OrthoBiotech Grant \$50,000 1997-2006
7. Co-Principal Investigator – Training Program in Musculoskeletal Research
NIAMS T32 AR07505 \$1,080,000 2002-2007
8. Collaborator – Declining DNA Repair in Aging Hematopoietic Stem Cells
NIA 1RO1 AG024916 \$1,512,000 2004-2009
9. Co-Principal Investigator – Training Program in Musculoskeletal Research
NIAMS T32 AR07505 \$1,763,375 2007-2012

BIBLIOGRAPHY

Published Papers

1. Rothschild, H.; Bicker, J.; and Marcus, R.: Regulation of the Beta and Alpha Hemoglobin Genes. Acta Haematologica, Vol. 56, No. 5, 1975.
2. Marcus, R.E.; Albers, W.E.; and Thompson, G.H.: Extruded Osteochondral Nail. Clinical Orthopaedics and Related Research, Vol. 157, pp. 161-163, 1981.
3. Marcus, R.E.: The Orthopaedic Management of the Multiply Injured Child. In: Problematic Musculoskeletal Injuries in Children, edited by G. R. Haughton and G. H. Thompson, pp. 193-210, London: Butterworths, 1983.
4. Marcus, R.E.; Balourdas, G.M.; and Heiple, K.G.: Ankle Arthrodesis by Chevron Fusion with Internal Fixation and Bone Grafting. The Journal of Bone and Joint Surgery, Vol. 65A, pp. 833-838, 1983.
5. Thompson, G.H.; Balourdas, G.M.; and Marcus, R.E.: Railyard Amputations in Children. The Journal of Pediatric Orthopaedics, Vol. 3, pp. 443-448, 1983.

6. Marcus, R.E.; Mills, M.F.; and Thompson, G.H.: Multiple Injury in Children. The Journal of Bone and Joint Surgery, Vol. 65A, pp. 1290-1294, 1983.
7. Smith, A.D.; Carter, J.B.; and Marcus, R.E.: The Os Vesalianum: An Unusual Cause of Lateral Foot Pain. Orthopedics, Vol. 7, pp. 86-89, 1984.
8. Thompson, G.H.; Wilber, J.H.; and Marcus, R.E.: Internal Fixation of Fractures in Children and Adolescents: A Comparative Analysis. Clinical Orthopaedics and Related Research, Vol. 188, pp. 10-20, 1984.
9. Bargar, W.L.; Marcus, R.E.; and Ittleman, F.P.: Late Thoracic Outlet Syndrome Secondary to Pseudarthrosis of the Clavicle. The Journal of Trauma, Vol. 24, No. 9, pp. 857-859, 1984.
10. Marcus, R.E.; and Hansen, S.T.: Bilateral Fracture-Dislocation of the Sacrum. The Journal of Bone and Joint Surgery, Vol. 66A, pp. 1292-1299, 1984.
11. Marcus, R.E.; Balourdas, G.M.; and Heiple, K.G.: Chevron Ankle Arthrodesis. Orthopaedics/Rheumatology Digest, August, pp. 27-29, 1984.
12. Marcus, R.E.; Smith, A.D.; and Carter, J.B.: Treatment of the Os Vesalianum. The Year Book of Podiatric Medicine and Surgery, pp. 1620-1621, 1985.
13. Zdeblick, T.A.; Lederman, M.M.; Jacobs, M.R.; and Marcus, R.E.: Preoperative Use of Providone-Iodine: A Prospective, Randomized Study. Clinical Orthopaedics and Related Research, Vol. 213, pp. 211-215, 1986.
14. Klein, L.; and Marcus, R.E.: Multiple Trauma in Children: Management, Prognosis and Metabolism. In: Trauma in Children, edited by R.E. Marcus, pp. 1-12, Maryland: Aspen Publishers, 1986.
15. Marcus, R.E.; and Hansen, S.T.: Bilateral Fractures of the Tibia: A Severe Injury Associated with Multiple Trauma. The Journal of Trauma, Vol. 27, No. 4, pp. 415-419, 1987.
16. Marcus, R.E.; and Heiple, K.G.: Arthrodesis of the Ankle. In: Operative Orthopaedics, edited by M.W. Chapman, Philadelphia, J.B. Lippincott, 1988.
17. Goodnough, L.T.; Shaffron, D.; and Marcus, R.E.: The Impact of Preoperative Autologous Blood Donation in Orthopaedic Surgical Practice. Vox Sanguinis, Vol. 59, pp. 65-69, 1990.
18. Goodnough, L.T.; Shaffron, D.; and Marcus, R.E.: Utilization and Effectiveness of Autologous Blood Donation for Arthroplastic Surgery. Journal of Arthroplasty, Vol. 5, pp. 89-94, 1990.
19. Goodnough, L.T.; and Marcus, R.E.: Homologous Blood Transfusion Needs in Elective Orthopaedic Surgery: Potential Role of Erythropoietin Therapy. New England Journal of Medicine, (at the request of the editor) Vol. 322, No. 6, pp. 1158-1159, 1990.

20. Marcus, R.E.; Figgie, H.E.; and Figgie, M.P.: The Shoulder and Elbow. In: Orthopaedics: Problems in Primary Care, edited by R.E. Marcus, pp. 17-42, Los Angeles, P.M.I.C., 1991.
21. Kraay, M.P.; and Marcus, R.E.: The Hip. In: Orthopaedics: Problems in Primary Care, edited by R.E. Marcus, pp. 109-134, Los Angeles, P.M.I.C., 1991.
22. Marcus, R.E.: The Ankle and Foot. In: Orthopaedics: Problems in Primary Care, edited by R.E. Marcus, pp. 185-208, Los Angeles, P.M.I.C., 1991.
23. Goodnough, L.T.; and Marcus, R.E.: Blood Transfusion in Elective Orthopaedic Surgery: Issues Related to Informed Consent. Prospectives in Orthopaedic Surgery, Vol. 2, No. 2, pp. 104-118, 1991.
24. Goodnough, L.T.; and Marcus, R.E.: Effect of Autologous Blood Donation in Patients Undergoing Elective Spine Surgery. Spine, Vol. 17, No. 2, pp. 172-175, 1992.
25. Marcus, R.E.; Heintz, J.J.; and Pattee, G.A.: Don't Throw Away the Austin Moore. Journal of Arthroplasty, Vol. 7, No. 1, pp. 31-36, 1992.
26. Goodnough, L.T.; Riddell, J.; Verbrugge, D.; and Marcus, R.E.: Blood Transfusions in Hip Fracture Patients: Implications for Blood Conservation Programs. Journal of Orthopaedic Trauma, Vol. 7, No. 1, pp. 47-51, 1993.
27. Marcus, R.E.; and Heiple, K.G.: Arthrodesis of the Ankle and Foot. In: Operative Orthopaedics, edited by Chapman, Philadelphia, J.B. Lippincott, 2nd edition, 1993.
28. Goodnough, L.T.; Vizmeg, K.; and Marcus, R.E.: Blood Lost and Transfused in Elective Orthopaedic Surgery Patients: Implications for Blood Conservation Programs. Surgery, Gynecology and Obstetrics, Vol. 176, pp. 235-238, 1993.
29. Marcus, R.E.; and Pfister, M.E.: The Enigmatic Diagnosis of Posterior Tibialis Tendon Rupture. The Iowa Orthopaedic Journal, Vol. 13, pp. 171-177, 1993.
30. Marcus, R.E.: The Effect of Erythropoietin on Red Blood Cell Volume in Autologous Blood Donors. Continuing Education in Orthopaedic Surgery, Orthopaedic Audio-Synopsis Foundation, Vol. 25, No. 7, October 1993.
31. Goodnough, L.T.; Verbrugge, D.; Marcus, R.E.; and Goldberg, V.M.: The Effect of Patient Size and Dose of Recombinant Human Erythropoietin Therapy on Red Blood Cell Volume Expansion in Autologous Blood Donors for Elective Orthopaedic Operation. Journal of the American College of Surgeons, Vol. 179, pp. 171-176, 1994.
32. Ziran, B.H.; and Marcus, R.E.: Biologic Fixation of Osteochondritis Dissecans of the Knee. Orthopaedics (International Edition), Vol. 2, No. 6, pp. 527-532, 1994.
33. Goodnough, L.T.; and Marcus, R.E.: The Effect of EPO Therapy on Red Cell Volume Expansion in Autogenous Blood Donors Undergoing Elective Orthopaedic Surgery. Contemporary Orthopaedics, Vol. 29, No 6, pp. 430-434, 1994.

34. Marcus, R.E.; Pfister, M.E.; and Goodfellow, D.G.: The Difficult Diagnosis of Posterior Tibialis Tendon Rupture in Sports Injuries. Orthopedics, Vol. 18, No. 8, pp. 715-721, 1995.
35. Goodnough, L.T.; Verbrugge, D.; and Marcus, R.E.: The Relationship Between Hematocrit, Blood Lost and Blood Transfused in Total Knee Replacement. The American Journal of Knee Surgery, Vol. 8, No. 3, pp. 83-87, 1995.
36. Tisdell, C.L.; Marcus, R.E.; and Heiple, K.G.: Triple Arthrodesis for Diabetic Peritalar Neuroarthropathy. Foot and Ankle International, Vol. 16, No. 6, pp. 332-338, 1995.
37. Yue, J.J.; and Marcus, R.E.: The Role of Internal Fixation in the Treatment of Jones Fractures in Diabetics. Foot and Ankle International, Vol. 17, No. 9, pp. 559-562, 1996.
38. Yue, J.J.; Wilber J.H.; Lipuma, J.P.; Murthi, A.; Carter, J.R.; Marcus, R.E.; and Valentz, R.: Posterior Hip Dislocations: A Cadaveric Angiographic Study. The Journal of Orthopaedic Trauma, Vol. 10, No. 7, pp. 447-454, 1996.
39. Victoroff, B.N.; Marcus, R.E.; and Deutsch, A.: Arthroscopic Bone Peg Fixation in the Treatment of Osteochondritis Dissecans in the Knee. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol. 12, No. 4, pp. 506-509, 1996.
40. Goodnough, L.T.; and Marcus, R.E.: The Erythropoietic Response to Erythropoietin in Therapy in Patients With Rheumatoid Arthritis. Journal of Laboratory and Clinical Medicine, Vol. 130, pp. 381-386, 1997.
41. Marcus, R.E.: Practical Biomechanics: Intramedullary Fixation Devices. Techniques in Orthopaedics, Vol. 13, No. 1, pp. 1-8, January 1998.
42. Goodnough, L.T.; and Marcus, R.E.: Erythropoiesis in Patients Stimulated with Erythropoietin: The Relevance of Storage Iron. Vox Sanguinis, Vol. 75, pp. 128-133, 1998.
43. Feltham, G.T.; Hanks, S.E.; and Marcus, R.E.: Age-Based Outcomes of Cheilectomy for the Treatment of Hallux Rigidus. Foot and Ankle International, Vol. 22, No. 3, pp. 192-197, 2001.
44. Kopp, F.J.; and Marcus, R.E.: Clinical Outcome of Surgical Treatment of the Symptomatic Accessory Navicular. Foot and Ankle International, Vol. 25, No. 1, pp. 27-30, 2004.
45. Kopp, F.J.; Banks, M.A.; and Marcus, R.E.: Clinical Outcome of Tibiotalar Arthrodesis Utilizing the Chevron Technique. Foot and Ankle International, Vol. 25, No. 4, pp. 225-230, 2004.
46. Stewart, S.L.; Cooperman, D.R.; and Marcus, R.E.: Treatment Failure in Stable Femoral Neck Fractures in the Elderly. Case Orthopaedic Journal, Vol. 1, No. 1, pp. 21-26, 2005.

47. de Asla, R.J.; Miric, A.; Hossain, A.; and Marcus, R.E.: Modified McBride Procedure: Unpredictable Results for the Treatment of Hallux Valgus. Case Orthopaedic Journal, Vol. 2, No. 1, pp 80-85, 2005.
48. Nalepka, J.L.; Lee, M.J.; Kraay, M.J.; Marcus, R.E.; Goldberg, V.M.; Chen, X.; and Greenfield, E.M.: Lipopolysaccharide Found in Aseptic Loosening of Patients with Inflammatory Arthritis. Clinical Orthopaedics and Related Research, Vol. 451, pp. 229-235, 2006.
49. Deutsch, A.; Spaulding, J.; and Marcus, R.E.: Preoperative Epoetin Alfa Versus Autologous Blood Donation in Primary Total Knee Arthroplasty. Journal of Arthroplasty, Vol. 21, No. 5, pp. 628-635, 2006.
50. Marcus, R.E.; Callaghan, J.J.; and DeRosa, G.P.: Demystifying the Orthopaedic Certification Process. The Journal of Bone and Joint Surgery, Vol. 89A, pp. 436-441, 2007.
51. Zalavras, C.G.; Marcus, R.E.; Levin, L.S.; and Patzakis, M.J.: Management of Open Fractures and Subsequent Complications. The Journal of Bone and Joint Surgery, Vol. 89A, pp. 884-894, 2007.
52. Goyal, K.S.; Skalak, A.S.; Marcus, R.E.; Vallier, H.A.; and Cooperman, D.R.: Analysis of Anatomic Periarticular Tibial Plate Fit on Normal Adults. Clinical Orthopaedics and Related Research, Vol. 461, pp. 245-257, 2007.
53. Wera, G.D.; Marcus, R.E.; Ghanayem, A.J.; and Bohlman, H.H.: Early Lumbar Disc Reherniation: Failure Following Subtotal Lumbar Discectomy Within One Year. The Journal of Bone and Joint Surgery, Vol. 90, pp. 10-15, 2008.
54. Wera, G.D.; Dean, C.L.; Ahn, U.A.; Marcus, R.E.; Cassinelli, E.C.; Bohlman, H.H.; and Ahn, N.U.: Reherniation and Failure Following Lumbar Discectomy: A Comparison of Fragment Excision Alone Versus Subtotal Discectomy. Journal of Spinal Disorders and Techniques, in press, 2007.

Published Books

1. Trauma in Children, by R.E. Marcus, ed., 288 pages, Maryland: Aspen, 1986.
2. Orthopaedics: Problems in Primary Care, by R. E. Marcus, 400 pages, Los Angeles, P.M.I.C., 1991.

Visiting Professorships and Invited Lectureships

1. Hospital for Joint Diseases, Department of Orthopaedics, New York University School of Medicine, New York, N.Y., October 1989.

2. University of Cincinnati Medical Center, Department of Orthopaedics, Cincinnati, Ohio, October 1993.
3. Albert Einstein Medical Center, Department of Orthopaedics, Philadelphia, Pennsylvania, October 1993.
4. Louisiana State University School of Medicine, Department of Orthopaedics, New Orleans, Louisiana, Redler Lectureship, November 1994.
5. Nippon University School of Medicine, Department of Orthopaedics, Tokyo, Japan, July 1995.
6. Hirosaki University School of Medicine, Department of Orthopaedics, Hirosaki, Japan, July 1995.
7. Japan Fracture Repair Society, 21st Annual Meeting, Special Guest Lecture, Osaka, Japan, July 1995.
8. International Seminar for Fracture Treatment, Guest Lecturer, Department of Orthopaedic Surgery, Osaka City University Medical School, Osaka, Japan, July 1995.
9. Greenville Medical Center, Department of Orthopaedics, Greenville, South Carolina, November 1995.
10. University of California Irvine, Department of Orthopaedics, Irvine, California, January 1996.
11. Temple University, Department of Orthopaedics, Philadelphia, Pennsylvania, December 1996.
12. Emory University, Department of Orthopaedics, Atlanta, Georgia, January 1997.
13. Royal College of Physicians and Surgeons of Canada, Guest Speaker, Hospital du Sacré Coeur, Montreal, April 1997.
14. Vanderbilt University, Department of Orthopaedics, Nashville, Tennessee, June 1997.
15. Australian Orthopaedic Association Keynote Speaker, High Energy Trauma Conference, Melbourne, Australia, August 1997.
16. Hennepin County Medical Center Annual Orthopaedic and Trauma Seminar Guest Speaker, Minneapolis, Minnesota, October 1997.
17. Inchon Kil Hospital, Department of Orthopaedics, Inchon, Korea, December 1998.
18. Ewha Women's University, Mokong Hospital, Department of Orthopaedic Surgery, Seoul, Korea, December 1998.

19. Tri-Service General Hospital National Defence Medical Center, Department of Orthopaedics, Taipei, Taiwan, Republic of China, December 1998.
20. Armed Forces Taoyuan General Hospital, Department of Orthopaedic Surgery, Taoyuan, Taiwan, Republic of China, December 1998.
21. Chungshan Medical College, Department of Orthopaedic Surgery, Taichung, Taiwan, Republic of China, December 1998.
22. ChiMei Hospital, Department of Orthopaedic Surgery, Tainan, Taiwan, Republic of China, December 1998.
23. National Police Medical Center, Department of Orthopaedics, Bangkok, Thailand, December 1998.
24. Mahidol University, Siriraj Hospital, Department of Orthopaedic Surgery, Bangkok, Thailand, December 1998.
25. Royal Thai Airforce Hospital, Department of Orthopaedic Surgery, Bangkok, Thailand, December 1998.
26. Lerdsin General Hospital, Department of Orthopaedic Surgery, Bangkok, Thailand, December 1998.
27. All-India Institute of Medical Sciences, Department of Orthopaedics, New Delhi, India, December 1998.
28. Hosmat Hospital, Department of Orthopaedics Trauma Symposium, Bangalore, India, December 1998.
29. Lehe Hospital, Department of Orthopaedics, Beijing, China, April 2000.
30. Shandong Medical University and Hospital, Department of Orthopaedics, Jinan, China, April 2000.
31. Southwest Hospital Third Military Medical University, Department of Orthopaedics, Chongqing, China, April 2000.
32. Guangzhou Red Cross Hospital and Medical College of Ji-Nan University, Department of Orthopaedics, Guangzhou, China, April 2000.
33. Changhai Hospital Second Military University, Department of Orthopaedics, Shanghai, China, April 2000.
34. Rui Jian Hospital Shanghai Second Medical University, Department of Orthopaedics, Shanghai, China, April 2000.

35. Shanghai Sixth Peoples Hospital, Department of Orthopaedics, Shanghai, China, April 2000.
36. Singapore General Hospital, Department of Orthopaedics, Singapore, September 2000.
37. Tan Tock Seng Hospital, Department of Orthopaedics, Singapore, September 2000.
38. University of Malaya, Department of Orthopaedics, University Hospital Kuala Lumpur, Malaysia, September 2000.
39. Mahidol University, Siriraj Hospital, Department of Orthopaedics, Bangkok, Thailand, September 2000.
40. Rajvithee Hospital, Department of Orthopaedics, Bangkok, Thailand, September 2000.
41. University of Cincinnati Medical Center, Department of Orthopaedics, Cincinnati, Ohio, December 2000.
42. University of Pennsylvania, Department of Orthopaedics Trauma Meeting, Guest Speaker, Philadelphia, Pennsylvania, May 2002.
43. Korean Fracture Society Annual Meeting, Guest Speaker, Seoul, Korea, October 2002.
44. The Royal College of Orthopaedic Surgeons of Thailand/ Thai Orthopaedic Association 24th Annual Meeting, Guest Speaker, Pattaya, Thailand, October 2002.
45. Dartmouth University School of Medicine, Department of Orthopaedic Surgery, Visiting Professor, Hanover, New Hampshire, September 2004.
46. Washington University School of Medicine, Department of Orthopaedic Surgery, Distinguished Lecturer and Visiting Professor, St. Louis, Missouri, October 2004.
47. Beaumont Medical Center, William Beaumont Hospital, Department of Orthopaedic Surgery, Visiting Lecturer, Royal Oak, Michigan, October 2005.
48. Albert Einstein Medical Center, Department of Orthopaedics, Visiting Professor, Philadelphia, Pennsylvania, April 2007.
49. Philadelphia Orthopaedic Society Rechtman Lecture, Philadelphia, Pennsylvania, April 2007.

Presentations to Local, National, and International Medical and Scientific Societies

1. The Metabolic Response to Trauma. The Swiss Institute for Surgical Research, Davos, Switzerland, March 1981.
2. Internal Fracture Fixation Techniques. Northeast Ohio Chapter of the National Association of Orthopaedic Nurses, Fall Meeting, Cleveland, Ohio, October 1981.
3. The Relationship of Ketone Metabolism in Traumatic Injury. Grand Rounds, Department of Surgery, Case Western Reserve University School of Medicine, Cleveland, Ohio, December 1981.
4. The Multiply Injured Child of Adolescent: The Case Western Reserve Experience. The Forty-Ninth Annual Meeting of the American Association of Orthopaedic Surgeons, New Orleans, Louisiana, January 1982.
5. The Orthopaedic Management of the Child with Neurologic Injury. The European-American Winter Neurosurgery Conference, Obergurgl, Austria, March 1982.
6. Closed Intramedullary Nailing of the Femur. Orthopaedic Grand Rounds Conference, The Mount Sinai Medical Center, Cleveland, Ohio, May 1982.
7. 1982 Concepts in Fracture Management. "Medicine Today" 1982, Case Western Reserve University School of Medicine, Cleveland, Ohio, May 1982.
8. The Management of Pelvic Fractures. Trauma Update, 1982, Case Western Reserve University School of Medicine, Cleveland, Ohio, May 1982.
9. Faculty - AO/ASIF, Advanced Course on the Operative Treatment of Fractures and Nonunions, sponsored by the Johns Hopkins School of Medicine, Hot Springs, Virginia, April 1983.
10. Railway Amputations in Children. The Association of Children's Prosthetic and Orthotic Clinics Annual Meeting, Salt Lake City, Utah, May 1983.
11. The Management of Fractures Associated with Vascular Trauma. Trauma Symposium, Case Western Reserve University School of Medicine, Cleveland, Ohio, June 1983.
12. Intramedullary Nailing: Variations on a Theme. Orthopaedic Grand Rounds Conference, Saint Luke's Hospital, Cleveland, Ohio, July 1983.
13. Orthopaedic Methods in Trauma. Radiology Grand Rounds, Case Western Reserve University School of Medicine, Cleveland, Ohio, November 1983.
14. Closed Intramedullary Nailing Techniques. Orthopaedic Grand Rounds, Touro Infirmary, New Orleans, Louisiana, February 1984.

15. Metabolic Response to Trauma in Adults. The European-American Neurosurgical Society, St. Moritz, Switzerland, March 1984.
16. Multiple Injury in Children. Tulane Caldwell Society Annual Meeting, New Orleans, Louisiana, May 1984.
17. Interlocking Intramedullary Nailing Techniques. Trauma Symposium, Sponsored by the Department of Orthopaedics, Case Western Reserve University, Cleveland, Ohio, August 1984.
18. Faculty - AO/ASIF Basic Course on the Operative Treatment of Fractures and Nonunions, Sponsored by the University of South Florida School of Medicine, Pheasant Run Resort, Illinois, September 1984.
19. A.O. Techniques in Fracture Management. Tulane University School of Medicine, Department of Orthopaedics, New Orleans, Louisiana, September 1984.
20. Chevron Ankle Arthrodesis. Louisiana Orthopaedic Association Annual Meeting, New Orleans, Louisiana, October 1984.
21. Pre-Operative User of Providine-Iodine: A Prospective Randomized Study. The Fifty-Second Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, Nevada, January 1985.
22. Faculty - AO/ASIF Basic Course on the Operative Treatment of Fractures and Nonunions, sponsored by the Swiss Association for the Study of Internal Fixation, Lake Buena Vista, Florida, September 1985.
23. Techniques of Internal Fixation in Fractures and Nonunions. Tulane University School of Medicine, Department of Orthopaedics, New Orleans, Louisiana, October 1985.
24. New Techniques of Closed Intramedullary Nailing. Case Western Reserve University School of Medicine, Orthopaedic Grand Rounds, May 1986.
25. Faculty - AO/ASIF Advanced Course on the Operative Treatment of Fractures and Nonunions, sponsored by the Swiss Association for the Study of Internal Fixation, Davos, Switzerland, December 1986.
26. Closed Interlocking Intramedullary Nailing of Long Bone Fractures. Herndon Society Biannual Meeting, Palm Beach, Florida, April 1987.
27. Chevron Technique for Ankle Arthrodesis. International Meeting of the Girdlestone Society, Nuffield Department of Orthopaedic Surgery, Oxford University, Oxford, England, September 1987.
28. MRI - Gadolinium Evaluation of the Lumbar Spine. European American Neurosurgical Society, International Meeting, Vienna, Austria, March 1988.

29. Faculty - AO/ASIF Techniques: Aims, Principles and Instrumentation of AO/ASIF, Cleveland Clinic, Cleveland, Ohio, July 1988.
30. Management of Shoulder Problems. University Hospitals of Cleveland, Department of Physical Therapy Seminar, Cleveland, Ohio, September 1988.
31. Unipolar Femoral Head Replacement Following Fractures. Orthopaedic Trauma Association, Dallas, Texas, October 1988.
32. Comparison of Bipolar and Austin Moore Replacement for Fractured Femoral Necks in the Elderly. Herndon Orthopaedic Society Biannual Meeting, Snowmass, Colorado, April 1989.
33. Unipolar Vs. Bipolar Hip Replacements. Grand Rounds, Hospital for Joint Diseases, Department of Orthopaedics, New York University School of Medicine, New York, N.Y., October 1989.
34. Don't Throw Away the Austin Moore. American Academy of Orthopaedic Surgeons' 57th Annual Meeting, New Orleans, Louisiana, February 1990.
35. Complex Tibial Shaft Fractures. Trauma Course on Upper and Lower Extremity Complex and Difficult Fracture Issues, Amelia Island, Florida, December 1990.
36. Intramedullary Nailing of Complex Tibial Fractures. Herndon Orthopaedic Society Biannual Meeting, Montego Bay, Jamaica, January 1991.
37. Erythropoietin in Surgical Anemias. Department of Medicine Postgraduate Course, Case Western Reserve University School of Medicine, Cleveland, Ohio, March 1991.
38. Design and Use of Intramedullary Nails. Michigan Orthopaedic Society, Bloomfield Hills, Michigan, April 1991.
39. Plate Fixation of Fractures: Theory and Technique. Grand Rounds, Department of Orthopaedics, Case Western Reserve University School of Medicine, Cleveland, Ohio, June 1991.
40. Treatment of Hip Fractures. Grand Rounds, Department of Orthopaedics, Case Western Reserve University School of Medicine, Cleveland, Ohio, September 1991.
41. Treatment of Complex Tibia Fractures. Youngstown Orthopaedic Surgeons' Fall Meeting, Youngstown, Ohio, September 1991.
42. Treatment of Femoral Neck Fractures. Department of Orthopaedics, Grand Rounds, Mt. Sinai Medical Center, Cleveland, Ohio, July 1992.
43. Indications, Techniques and Results of Intramedullary Nailing of Femoral and Tibial Fractures. Maryland Shock Trauma Hospital, Trauma Meeting, Baltimore, Maryland, August 1992.

44. The Use of Intramedullary Fixation for Complex Femoral and Tibial Fracture. Department of Orthopaedic Surgery, Columbia University College of Physicians and Surgeons, Trauma Course, New York, New York, October 1992.
45. Technique and Complications in Intramedullary Nailing of the Femur, Management of Complex Fractures Course. Richard F. Kyle, M.D., Chairman, Vail, Colorado, January 1993.
46. The Effect of Erythropoietin Therapy in Red Blood Cell Volume Expansion in Autologous Blood Donors Undergoing Elective Orthopaedic Surgery. American Academy of Orthopaedic Surgery, San Francisco, California, February 1993.
47. Complex Femoral and Tibial Nailings. American Osteopathic Academy of Orthopaedics, 33rd Annual Postgraduate Seminar, Scottsdale, Arizona, April 1993.
48. Complications of Femoral Shaft Fractures. San Diego Course in Management of Complex Fractures, San Diego, California, June 1993.
49. Knee Injuries, Evaluation and Treatment. Cleveland Academy of Trial Attorneys, Cleveland, Ohio, September 1993.
50. Hip Fractures. Orthopaedic Grand Rounds, Department of Orthopaedics, Case Western Reserve University, Cleveland, Ohio, October 1993.
51. Complications of Intramedullary Nailing. Orthopaedic Grand Rounds, Department of Orthopaedics, University of Cincinnati, Cincinnati, Ohio, October 1993.
52. Techniques of Intramedullary Nailing. Orthopaedic Grand Rounds, Department of Orthopaedics, The Toledo Hospital, Toledo, Ohio, October 1993.
53. Complications of Intramedullary Nailing. Orthopaedic Grand Rounds, Department of Orthopaedics, Albert Einstein Medical Center, Temple University School of Medicine, Philadelphia, Pennsylvania, October 1993.
54. Technique of Intramedullary Nailing. Course in the Management of Complex Fractures, Problems and Solutions, Robert A. Winquist, M.D., Chairman, Amelia Island, Florida, December 1993.
55. Cementless Total Knee Arthroplasty for Osteoarthritis: A Five to Nine Year Functional and Radiological Outcome Study. Goldberg V.M., Buly R.L. and Marcus R.E., American Academy of Orthopaedic Surgeons' 61st Annual Meeting, New Orleans, Louisiana, February 1994.
56. Treatment of Subtrochanteric Fractures of the Femur. Symposium on New Concepts in Long Bone Fracture Fixation, David Templeman, M.D., Chairman, Houston, Texas, May 1994.

57. The Use of Ceramic Unipolar Arthroplasty in the Treatment of Hip Fractures. The Seventh Irving Redler M.D. Orthopaedic Memorial Lecture Touro Infirmary, New Orleans, Louisiana, November 1994.
58. Complications of Intramedullary Nailing. Orthopaedic Grand Rounds, Louisiana State University School of Medicine, New Orleans, Louisiana, November 1994.
59. Biomechanics of I.M. Nailing. 3rd Annual Management of Complex Fractures Problems and Solutions, Richard F. Kyle, M.D., Chairman, Vail, Colorado, January 1995.
60. Design of Intramedullary Fixation Devices. Zimmer Canada National Meeting, Toronto, Canada, February 1995.
61. Ceramic Unipolar Hip Replacement in the Treatment of Femoral Neck Fractures. Orthopaedic Grand Rounds, St. Luke's Hospital, Cleveland, Ohio, February 1995.
62. Design of a Unipolar Ceramic Hip. Charles Herndon Orthopaedic Society Biannual Meeting, St. Croix, U.S.V.I., March 1995.
63. Biomechanics of I.M. Nails. Cleveland Trauma Update, Randall E. Marcus, M.D., Chairman, Cleveland, Ohio, April 1995.
64. Bone Grafting in Revision Total Hip Surgery. Hip and Knee Revision Seminar, Department of Orthopaedics, University of California, Davis, California, April 1995.
65. Outcome of 100 Consecutive Cementless Femoral Components, Minimal 5-Year Follow-Up. 108th Annual Meeting of the American Orthopaedic Association, White Sulphur Springs, West Virginia, June 1995.
66. Results of a Cementless Total Knee Arthroplasty with a Cemented Congruent Patella. 108th Annual Meeting of the American Orthopaedic Association, White Sulphur Springs, West Virginia, June 1995.
67. Design and Biomechanics of Intramedullary Fixation Devices. Orthopaedic Grand Rounds, Nippon University Medical Center, Tokyo, Japan, July 1995.
68. Design and Biomechanics of Intramedullary Fixation Devices. Orthopaedic Grand Rounds, Hirosaki University Medical Center, Hirosaki, Japan, July 1995.
69. Treatment of Open Fractures of the Tibia, Special Lecture. The 21st Annual Meeting of the Japan Fracture Society, Osaka, Japan, July 1995.
70. Complications of Intramedullary Nailing of the Femur. International Seminar for Fracture Treatment, Osaka, Japan, July 1995.
71. Technique of Femoral Shaft Intramedullary Nailing and Proximal Femur Reconstructive Nailing. Orthopaedic Trauma Association Residents Fracture Course, Tampa, Florida, September 1995.

72. Biomechanics of Intramedullary Devices. Orthopaedic Grand Rounds, Greenville Memorial Medical Center, Greenville, South Carolina, November 1995.
73. Design and Biomechanics of Intramedullary Fixation Devices. Orthopaedic Grand Rounds, Department of Orthopaedics, University of California Irvine, Irvine, California, January 1996.
74. Biomechanics of I.M. Nailing. 10th Annual Vail Orthopaedic Symposium, Richard Kyle, M.D., Chairman, Vail, Colorado, January 1996.
75. Clinical Applications and Techniques in the Treatment of Open Tibia Fractures and Biomechanics - Design Considerations of the ZMS Nail System. Trauma Symposium, Division of Orthopaedics, Dalhousie University, Halifax, Nova Scotia, 1996.
76. Complications of Intramedullary Nailing and Intramedullary Fixation Devices - Biomechanics, Trauma Update. University of Southern California, Jackson Lee, M.D., Chairman, Dana Point, California, June 1996.
77. Oxidized Zirconium for Hemiarthroplasty. Orthopaedic Grand Rounds, Case Western Reserve University School of Medicine, Cleveland, Ohio, July 1996.
78. Biomechanics of Intramedullary Nails. Orthopaedic Grand Rounds, St. Luke's Medical Center, Cleveland, Ohio, August 1996.
79. Techniques of Femoral Shaft Nail Fixation. Orthopaedic Trauma Association Residents' Basic Fracture Course, Boston, Massachusetts, September 1996.
80. Reamed vs. Unreamed Nails – Biomechanics. International Trauma Update, Robert Winquist, M.D., Chairman, Phoenix, Arizona, November 1996.
81. Soft Tissue Management of Open Fractures. Western Reserve Care System Department of Surgery Grand Rounds, Youngstown, Ohio, November 1996.
82. Design and Biomechanics of Intramedullary Nails. Orthopaedic Grand Rounds, Temple University School of Medicine, Philadelphia, Pennsylvania, December 1996.
83. Biomechanics of Intramedullary Fixation Devices. Orthopaedic Grand Rounds, Emory University School of Medicine, Atlanta, Georgia, January 1997.
84. Biomechanics of I.M. Nailing, Trauma Update. 11th Annual Vail Orthopaedic Symposium, Richard Kyle, M.D., Chairman, Vail, Colorado, January 1997.
85. Management of Lower Extremity Trauma and Soft Tissue Injuries; Biomechanics and Design of Intramedullary Fixation Devices; Technique of Reconstructive Intramedullary Nailing. Guest Speaker of the Royal College of Physicians and Surgeons of Canada, "Les Journées de Traumatologie," Hospital du Sacré Coeur, Montreal, Canada, April 1997.

86. Soft Tissue Management in Open Fractures; Indirect Reduction in Fracture Fixation. International Trauma Update, T.A. Russell, M.D., Chairman, Maui, Hawaii, April 1997.
87. Treatment Failure in Femoral Neck Fractures in Patients 80 Years of Age and Older. 49th Annual Meeting of the Association of Bone and Joint Surgeons, Scottsdale, Arizona, May 1997.
88. Indirect Reduction Techniques in Fracture Fixation. Orthopaedic Grand Rounds, Greenville Medical Center, Greenville, South Carolina, May 1997.
89. Biomechanics of Intramedullary Fixation Devices. Department of Orthopaedics, Vanderbilt University School of Medicine, Nashville, Tennessee, June 1997.
90. Biomechanics and Design of Intramedullary Nails. Grand Rounds, Department of Orthopaedics, Case Western Reserve University School of Medicine, Cleveland, Ohio, June 1997.
91. Priorities and Guidelines in Managing the Multiple Trauma Patient; Status of Intramedullary Rods in Acute Trauma in the Femur; Who Deserves Amputation; Talus Fractures and Dislocations: Operative Management, Results and Complications. Australian Orthopaedic Association High Energy Trauma Meeting, Melbourne, Australia, July 1997.
92. Biomechanics of Intramedullary Fixation; Complex Fractures of the Distal Femur: Indirect Reduction Techniques; Current Treatment of Talus Fractures. Hennepin County Medical Center Annual Orthopaedic and Trauma Seminar, Minneapolis, Minnesota, October 1997.
93. Percutaneous Pin Fixation of Proximal Humeral Fractures. Orthopaedic Trauma Association Annual Meeting, Louisville, Kentucky, October 1997.
94. Technique of Reconstructive Intramedullary Nailing of the Femur. Orthopaedic Trauma Association Residents' Basic Fracture Course, Louisville, Kentucky, October 1997.
95. Diabetic Charcot Arthropathy. Case Western Reserve University School of Medicine, University Hospitals Multidisciplinary Symposium, Salvaging the Diabetic Foot, Cleveland, Ohio, October 1997.
96. Charcot Foot Deformity. Multidisciplinary Symposium - Salvaging the Diabetic Foot, Sponsored by the Divisions of Endocrinology and Vascular Surgery, University Hospitals of Cleveland and Case Western Reserve University School of Medicine, October 1997.
97. Femoral Fractures in Children; Open Reduction Internal Fixation of Proximal Humeral Fractures; Management of Fractures of the Talus. Trauma Update, 12th Annual Vail Orthopaedic Symposium, Richard Kyle, M.D., Chairman, Vail, Colorado, January 1998.
98. Intramedullary Nailing of the Femur. Instructional Course Lecture (216), American Academy of Orthopaedic Surgeons, 65th Annual Meeting, New Orleans, Louisiana, March 1998.

99. Modified McBride Procedure: Unpredictable Results as Treatment for Hallux Valgus; Outcome Study of Tibiotalar Arthrodesis by the Chevron Fusion Technique. 50th Annual Meeting of the Association of Bone and Joint Surgeons, Aspen, Colorado, June 1998.
100. Ceramic Unipolar Prosthesis for the Treatment of Displaced Femoral Neck Fractures in the Elderly. Annual Meeting of the Girdlestone Orthopaedic Society of Oxford University, Gratz, Austria, August 1998.
101. Hallux Valgus: What Works and What Doesn't. The President's Guest Lecture, Cleveland Orthopaedic Society, Cleveland, Ohio, October 1998.
102. Intramedullary Nailing of Femoral Shaft Fractures. Orthopaedic Trauma Association Residents' Basic Fracture Course, Vancouver, Canada, October 1998.
103. Update Knowledge - Intramedullary Nailing Design and Biomechanics. Inchon Kil Hospital, Department of Orthopaedics, Inchon, Korea, December 1998.
104. Biomechanics of Intramedullary Nailing. Ewha Women's University, Mokong Hospital, Department of Orthopaedic Surgery, Seoul, Korea, December 1998.
105. Biomechanics, Design and Decision-Making in Intramedullary Nailing of the Femur. Tri-Service General Hospital National Defence Medical Center, Department of Orthopaedics, Taipei, Taiwan, Republic of China, December 1998.
106. Biomechanics of Intramedullary Nailing. Armed Forces Taoyuan General Hospital, Department of Orthopaedic Surgery, Taoyuan, Taiwan Republic of China, December 1998.
107. Soft Tissue Management of Open Fractures. Chungshan Medical College, Department of Orthopaedic Surgery, Taichung, Taiwan, Republic of China, December 1998.
108. Biomechanics and Technique of Intramedullary Fixation. ChiMei Hospital, Department of Orthopaedic Surgery, Tainan, Taiwan, Republic of China, December 1998.
109. Complications, Design and Technique of Intramedullary Nailing. National Police Medical Center, Department of Orthopaedics, Bangkok, Thailand, December 1998.
110. Biomechanics and Design of Intramedullary Fixation Devices. Mahidol University, Siriraj Hospital, Department of Orthopaedic Surgery, Bangkok, Thailand, December 1998.
111. Biomechanics - Knowledge Update, Intramedullary Nailing. Royal Thai Airforce Hospital, Department of Orthopaedic Surgery, Bangkok, Thailand, December 1998.
112. Techniques for Extraction of Broken Intramedullary Nails. Lerdsin General Hospital, Department of Orthopaedic Surgery, Bangkok, Thailand, December 1998.
113. Biomechanics and Design of Intramedullary Nails; Indirect Reduction Techniques for Intra-Articular Fractures. All-India Institute of Medical Sciences, Department of Orthopaedics, New Delhi, India, December 1998.

114. Complications and Pitfalls of Intramedullary Nailing of the Femur. Hosmat Hospital, Department of Orthopaedics Trauma Symposium, Bangalore, India, December 1998.
115. Lisfranc Dislocations; Biomechanics of Intramedullary Rods; Indirect Reduction of the Femur. Trauma Update, 13th Annual Vail Orthopaedic Symposium, Richard Kyle, M.D., Chairman, Vail, Colorado, January 1999.
116. Clavicle Fractures - Classification and Complications; Fractures of Both Bones of the Forearm. Upper Extremity: Problem Fractures and Reconstructive Challenges, Thomas Varecka, M.D., Chairman, Vail, Colorado, January 1999.
117. Intramedullary Nailing of the Femur. Instructional Course Lecture (352), American Academy of Orthopaedic Surgeons, 66th Annual Meeting, Anaheim, California, February 1999.
118. Charcot Foot: Diagnosis and Treatment. First Scientific Symposium, The Diabetic Foot, Department of Veterans Affairs Medical Center, Cleveland, Ohio, April 1999.
119. Biomechanics of Nailing. Trauma Update - New York, Robert A. Winqvist, M.D., Chairman, New York, NY, December 1999.
120. Indirect Reduction of the Femur and Biomechanics of IM Rods. Trauma Update, 14th Annual Vail Orthopaedic Symposium, Richard Kyle, M.D., Chairman, Vail, Colorado, January 2000.
121. Fractures of Both Bones of the Forearm. Upper Extremity: Problem Fractures and Reconstructive Challenges, 14th Annual Vail Orthopaedic Symposium, Thomas Varecka, M.D., Chairman, Vail, Colorado, January 2000.
122. Cheilectomy for Hallux Rigidus. Poster Presentation, American Academy of Orthopaedic Surgeons, 67th Annual Meeting, Orlando, Florida, March 2000.
123. Intramedullary Nailing of the Femur. Instructional Course Lecture, American Academy of Orthopaedic Surgeons, 67th Annual Meeting, Orlando, Florida, March 2000.
124. Long Bone Nonunion: Bone Grafting and Substitutes: Choice and Techniques. Orthopaedic Trauma Association, Trauma Management and Controversies, Kansas City, Missouri, April 2000.
125. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Lehe Hospital, Department of Orthopaedics, Beijing, China, April 2000.
126. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Shandong Medical University and Hospital Department of Orthopaedics, Jinan, China, April 2000.

127. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Southwest Hospital Third Military Medical University, Department of Orthopaedics, Chongqing, China, April 2000.
128. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Guangzhou Red Cross Hospital and Medical College of Ji-Nan University, Department of Orthopaedics, Guangzhou, China, April 2000.
129. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Changhai Hospital Second Military University, Department of Orthopaedics, Shanghai, China, April 2000.
130. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Rui Jian Hospital Shanghai Second Medical University, Department of Orthopaedics, Shanghai, China, April 2000.
131. Biomechanics and Design of Intramedullary Fixation Devices and Techniques of Intramedullary Nailing. Shanghai Sixth Peoples Hospital, Department of Orthopaedics, Shanghai, China, April 2000.
132. Age Based Outcomes of Cheilectomy for the Treatment of Hallux Rigidus. Association of Bone and Joint Surgeons, 52nd Annual Meeting, San Antonio, Texas, May 2000.
133. Reconstructive Femoral Nailing. 2000 National Orthopaedic Resident Program, Robert A. Winquist, M.D., Chairman, Chicago, Illinois, August 2000.
134. Biomechanics and Design of Intramedullary Devices and Removal of Broken Implants. Department of Orthopaedics, Singapore General Hospital, Singapore, September 2000.
135. Biomechanics and Design of Intramedullary Devices and Removal of Broken Implants. Department of Orthopaedics, Tan Tock Seng Hospital, Singapore, September 2000.
136. Biomechanics and Design of Intramedullary Devices and Removal of Broken Implants; Technique of Femoral Intramedullary Nailing. Malaysia Orthopaedic Meeting, Kuala Lumpur, Malaysia, September 2000.
137. Reconstructive Femoral Intramedullary Nailing. Department of Orthopaedics, Siriraj Hospital, Bangkok, Thailand, September 2000.
138. Reconstructive Femoral Intramedullary Nailing. Department of Orthopaedics, Rajvithee Hospital, Bangkok, Thailand, September 2000.
139. Closed Reconstructive Intramedullary Nailing of the Femur. Orthopaedic Trauma Association Residents Basic Fracture Course, San Antonio, Texas, October 2000.
140. Biomechanics of Nailing. 2000 Trauma Update, Robert A. Winquist, M.D., Chairman, New York, New York, December 2000.

141. Biomechanics of Intramedullary Fixation Devices. University of Cincinnati Medical Center Department of Orthopaedics, December 2000.
142. Chevron Ankle Arthrodesis: Technique and Long-Term Results. Case Western Reserve University, Department of Orthopaedics Grand Rounds, Cleveland, Ohio, December 2000.
143. Treatment of Non-Union of the Humerus; Fractures of the Forearm; Upper Extremity Problem Fractures and Reconstructive Challenges. 15th Annual Vail Orthopaedics Symposium, Thomas Varecka, M.D., Chairman, Vail, Colorado, January 2001.
144. Biomechanics of I.M. Nails and Indirect Fracture Reduction. Trauma Update, 15th Annual Vail Orthopaedic Symposium, Richard Kyle, M.D., Chairman, Vail, Colorado, January 2001.
145. Intramedullary Nailing of the Femur. Instructional Course Lecture (213), American Academy of Orthopaedic Surgeons, 68th Annual Meeting, San Francisco, California, March 2001.
146. Ceramic Unipolar Prosthesis for the Treatment of Displaced Femoral Neck Fractures in the Elderly. Association of Bone and Joint Surgeons, 53rd Annual Meeting, New Orleans, Louisiana, April 2001.
147. Treatment Failure in Stable Femoral Neck Fractures in the Elderly. Poster Presentation, The American Orthopaedic Association 114th Annual Meeting, Palm Beach, Florida, June 2001.
148. Recon Nailing of the Femur. 2001 National Orthopaedic Resident Program, Robert A. Winquist, M.D., Chairman, Chicago, Illinois, August 2001.
149. Fractures of the Midfoot, Navicular and Compartment Syndrome of the Foot. AOFAS Regional Review Course, Cleveland Clinic Foundation, Cleveland, Ohio, September 2001.
150. Biomechanics of Intramedullary Nails. 2001 Trauma Update, Robert A. Winquist, M.D., Chairman, New York, New York, December 2001.
151. The Treatment of Both Bone Forearm Fractures; Treatment of Clavicle Fractures. Upper Extremity Course: Problem Fractures and Reconstructive Challenges, Thomas F. Varecka, M.D., University of Minnesota Hennepin Medical Center, Chairman, Vail, Colorado, January 2002.
152. Intramedullary Nailing of the Femur. Instructional Course Lecture (Chairman), American Academy of Orthopaedic Surgeons, 69th Annual Meeting, Dallas, Texas, February 2002.
153. Reconstructive Intramedullary Nailing of the Femur. 2002 National Orthopaedic Resident Course, Robert A. Winquist, M.D., Chairman, Chicago, Illinois, April 2002.
154. Treatment of Open Tibia Fractures with Intramedullary Nailing; Biomechanics of Nailing. University of Pennsylvania Annual Trauma Meeting, Christopher T. Born, M.D., and William G. Delong Jr., M.D., Chairmen, Philadelphia, Pennsylvania, May 2002.

155. Outcome Study of Tibiotalar Arthrodesis Utilizing the Chevron Technique. The American Orthopaedic Association 115th Annual Meeting in Joint with the Canadian Orthopaedic Association 57th Annual Meeting, Victoria, British Columbia, Canada, June 2002.
156. Management of Open Tibia Fractures with Intramedullary Nails; Management of Peritrochanteric Femur Fractures. 2002 Michigan Orthopaedic Trauma Update, Clifford Jones, M.D., Chairman, Traverse City, Michigan, August 2002.
157. Complications and Pitfalls with Intramedullary Nailing of Fractures. The Korean Fracture Society Annual Meeting, Seoul, Korea, October 2002.
158. The Management of Midfoot Fractures; The Management of Open Tibia Fractures with Intramedullary Nailing; The Treatment of Humeral Fracture Non-union; The Current Advances in Intramedullary Nailing of Fractures of the Lower Extremities. The Royal College of Orthopaedic Surgeons of Thailand/ 24th Annual Meeting of the Thai Orthopaedic Association, Pattaya, Thailand, October 2002.
159. Design and Biomechanics of Intramedullary Nails. 2002 Trauma Course, Robert A. Winqvist, M.D., Chairman, New York, New York, December 2002.
160. Treatment of Clavicle Fractures; Humeral Shaft Fractures: Plating vs. Intramedullary Nailing Fixation. Upper Extremity: Problem Fractures and Reconstructive Challenges, Thomas Vareka, M.D., Chairman, Vail, Colorado, January 2003.
161. Biomechanics of Intramedullary Fixation; Indirect Reduction Technique. Trauma Update, Richard F. Kyle, M.D., Chairman, Vail, Colorado, January 2003.
162. Intramedullary Nailing of the Femur. Instructional Course Lecture (Chairman), American Academy of Orthopaedic Surgeons, 70th Annual Meeting, New Orleans, Louisiana, February 2003.
163. A Single-Center, Open-Label, Randomized Parallel-Group Study Comparing the Preoperative Administration of Epoetin Alfa to Preoperative Autologous Blood Donation in Primary Total Knee Arthroplasty. The Association of Bone and Joint Surgeons, 55th Annual Meeting, Paris, France, May 2003.
164. Keynote Address: Past and Current Concepts, Intramedullary Treatment of Fractures. 2003 Orthopaedic Nursing Update, Chicago, Illinois, August 2003.
165. Biomechanics of Femoral Nailing. 2003 Trauma Symposium, Robert A. Winqvist, M.D., Chairman, New York, New York, December 2003.
166. Plating of Humeral Shaft Fractures; Indications for Open Reduction Internal Fixation of the Clavicle; and Technical Tips for Open Reduction and Internal Fixation of Both-Bone Forearm Fractures. Upper Extremity and Reconstructive Challenges, Thomas Vareka, M.D., Chairman, Vail, Colorado, January 2004.

167. Indirect Reduction Techniques for Fractures; and Biomechanics of Intramedullary Fixation. Trauma Update, Richard F. Kyle, Chairman, Vail, Colorado, January 2004.
168. Intramedullary Nailing of the Femur. Instructional Course Lecture (Chairman), American Academy of Orthopaedic Surgeons, 71st Annual Meeting, San Francisco, California, March 2004.
169. Lateral Neutralization versus Posterior Antigliding Plating of Closed Distal Fibula Fractures (Poster). American Academy of Orthopaedic Surgeons, 71st Annual Meeting, San Francisco, California, March 2004.
170. Biomechanics of Fracture Fixation. Dartmouth University School of Medicine, Department of Orthopaedic Surgery Grand Rounds, Hanover, New Hampshire, September 2004.
171. Biomechanics of Intramedullary Fixation Devices. Washington University School of Medicine, Department of Orthopaedic Surgery, Distinguished Lecturer, St. Louis, Missouri, October 2004.
172. Ankle Fractures. 2004 Trauma Residents Course, James A. Goulet, M.D., David C. Templeman, M.D., and Lawrence X. Webb, M.D., Directors, Newport, Rhode Island, November 2004.
173. Biomechanics of Intramedullary Nailing. 2004 New York City Trauma Update Meeting, Robert A. Winquist, M.D., Director, New York, New York, December 2004.
174. Humeral Fractures: Non-Union; and Both-Bone Forearm Fractures: Technical Tips. Upper Extremity Trauma Update, Thomas Vareka, M.D., Chairman, Vail, Colorado, January 2005.
175. Minimally Invasive Approach to Periarticular Plating Technique: Indirect Reduction; and The Femur: Biomechanics of IM Rods. Trauma Update, James A. Goulet, M.D., Richard Kyle, M.D., and David C. Templeman, M.D., Chairmen, Vail, Colorado, January 2005.
176. Intramedullary Nailing of the Femur. Instructional Course Lecture (Chairman). American Academy of Orthopaedic Surgeons, 72nd Annual Meeting, Washington, D.C., March 2005.
177. Hallux Valgus: Anatomy, Biomechanics and Treatment. William Beaumont Hospital, Department of Orthopaedic Surgery, Grand Rounds, Royal Oak, Michigan, October 2005.
178. Compression Hip Screw Fixation Treatment for Intertrochanteric Hip Fractures and Biomechanics of Intramedullary Nails. 2005 Trauma Update, Robert A. Winquist, M.D., Chairman, New York, New York, December 2005.
179. Both Bone Forearm Fractures. Current Concepts (Keynote Address), 20th Annual Vail Orthopaedic Symposium, Upper Extremity Trauma, Thomas Vareka, M.D., Chairman, Vail, Colorado, January 2006.

180. Supracondylar Fractures of the Elbow in the Elderly – Open Reduction Internal Fixation Treatment (Debate), 20th Annual Vail Orthopaedic Symposium, Upper Extremity Trauma, Thomas Varecka, M.D., Chairman, Vail, Colorado, January 2006.
181. Management of Open Fractures and Subsequent Complications: Bone Grafting and Supplemental Procedures to Achieve Healing. 73rd Annual Meeting of the American Academy of Orthopaedic Surgeons, Instructional Course Lecture, Chicago, Illinois, March 2006.
182. A Unique Digital Expression of Tibial Plate Fit on Normal Humans. Goyal, K.S., Skalak, A.S., Marcus, R.E., Vallier, H.A., Cooperman, D.R., Association of Bone and Joint Surgeons, 58th Annual Meeting, Buenos Aires, Argentina, April 2006.
183. The Anatomic Periarticular Plate – An Oxymoron? Goyal, K., Cooperman, D., Marcus, R., Ohio Orthopaedic Society 67th Annual Meeting, Aurora, Ohio, May 2006.
184. Analysis of Anatomic Periarticular Tibial Plate Fit on Normal Adults. Marcus, R.E., Goyal, K.S., Skalak, A.S., Vallier, H.A., Haile-Salassie, J., Cooperman, D.R., The Girdlestone Orthopaedic Society, Lisbon, Portugal, June 2006.
185. Reherniation and Failure Following Lumbar Discectomy: A Comparison of Frequent Excision Alone Versus Subtotal Discectomy (Poster Presentation). Wera, G., Ahn, N., Marcus, R., Bohlman, H.: North American Spine Society, 21st Annual Meeting, Seattle, Washington, September 2006.
186. A Comparison of Periarticular Tibial Plate Fit on Normal Humans (Poster Presentation). Goyal, K.S., Toogood, P.A., Marcus, R.E., Vallier, H.A., Haile-Salassie, J., Cooperman, D.R., Orthopaedic Trauma Association Annual Meeting, Phoenix, Arizona, October 2006.
187. Compression Hip Screw Fixation for Intertrochanteric Hip Fractures and Biomechanics of Intramedullary Nails. 2006 Trauma Update, Robert Winkquist, M.D., Chairman, New York, New York, December 2006.
188. Both Bone Forearm Fractures—What’s the Latest? 21st Annual Vail Orthopaedic Symposium, Advanced Trauma Update, Thomas Varecka, M.D., Chairman, Vail, Colorado, January 2007.
189. Management of Isolated Diaphyseal Fracture of the Clavicle (Debate). 21st Annual Vail Orthopaedic Symposium, Advanced Trauma Update, Thomas Varecka, M.D., Chairman, Vail, Colorado, January 2007.
190. Current Concepts in Hallux Valgus Treatment. 74th Annual Meeting of the American Academy of Orthopaedic Surgeons, Instructional Course Lecture, San Diego, California, February 2007.
191. Management of Open Fractures and Subsequent Complications: Bone Grafting and Other Techniques to Promote Healing. 74th Annual Meeting of the American Academy of Orthopaedic Surgeons, Instructional Course Lecture, San Diego, California, February 2007.

192. A Comparison of Fragment Excision Versus Subtotal Discectomy. 74th Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California, February 2007.
193. Is Preoperative Medical Evaluation in Hip Fracture Patients Indicated? (Poster Exhibit). 74th Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California, February 2007.
194. Soft Tissue Injuries of the Foot and Ankle. Case Western Reserve University Department of Orthopaedics Grand Rounds, Cleveland, Ohio, February 2007.
195. Biomechanics of Intramedullary Nails. Albert Einstein Medical Center, Department of Orthopaedics Grand Rounds, Philadelphia, Pennsylvania, April 2007.
196. Demystifying the Orthopaedic Certification and Recertification (M.O.C.) Process. Philadelphia Orthopaedic Society (Rechtman Lecture), Philadelphia, Pennsylvania, April 2007.
197. Is Preoperative Medical Evaluation in Hip Fracture Patients Indicated? Association of Bone and Joint Surgeons, 59th Annual Meeting, Lexington, Kentucky, April 2007.
198. Preoperative Evaluation in Hip Fracture Patients—What is Best? The Oxford University Girdlestone Orthopaedic Society Annual Meeting, St. Anne's College, Oxford, England, July 2007.
199. Medical vs. Anesthesia Preoperative Evaluation in Hip Fracture Patients, and American Board of Orthopaedic Surgery Update. Twentieth Century Orthopaedic Association 62nd Annual Meeting, Nisswa, Minnesota, August 2007.
200. Analysis of Precontoured Proximal Tibia Periarticular Plate Fit Across a Population (Poster Exhibit). Orthopaedic Trauma Association 23rd Annual Meeting, Boston, Massachusetts, October 2007.
201. Biomechanics of Intramedullary Nailing. 2007 Trauma Update, David Ruch, M.D., Lawrence Webb, M.D., and Robert Winqvist, M.D., Chairmen, New York, New York, December 2007.

TEACHING AWARDS

Case Western Reserve University Department of Medicine Ambulatory Medicine Teaching Excellence Award, 1996-1997.

CLINICAL PRACTICE AWARDS

America's Top Surgeons, Consumers' Research Council of America, 2001, 2002, 2003, 2004, 2005, 2006, and 2007.