

**1999-2000**  
**SUMMARY OF SCHOLARLY ACTIVITIES**  
**DEPARTMENT OF ORTHOPAEDIC SURGERY**

**I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS**

**A. Full-length published articles.**

**R.F. Coles, F.M. Clements, J.W. Lardenoye, G.N. Wermeskerken, L.A. Hey, J.A. Nunley, L.S. Levin, and A.W. Pearsall. Transesophageal Echocardiography in Quantification of Emboli During Femoral Nailing: Reamed vs. Unreamed Techniques. J. South. Orthop. Assn., 9(2):98-104 (2000).**

**B.B. Hofheins, G.L. White, Jr., and R.D. Meldrum. Achilles Tendon Ruptures: Pathology and Surgical Treatment. Surg. Phys. Assistant 5(9):20-24 (1999).**

**J. Kovalski, L.R. Gurchiek, R.J. Heitman, J.M. Hollis, and A.W. Pearsall. Instrumented Measurement of Anterior-Posterior and Inversion-Eversion Laxity of the Normal Ankle Joint Complex. Foot Ankle Int. 20(12):808-814 (1999).**

**A.W. Pearsall, T.F. Holovacs, and K.P. Speer. The Use of a Low Anterior Five O'Clock Portal During Arthroscopic Shoulder Surgery Performed in the "Beach Chair" Position. Am. J. Sports Med. 27(5):571-574 (1999).**

**A.W. Pearsall, T.F. Holovacs, and K.P. Speer. Characterization of the Intraarticular Component of the Subscapularis Tendon: Anatomic and Histologic Correlation in Reference to Surgical Release in Patients With Frozen Shoulder Syndrome. Arthroscopy 16(3):236-242 (2000).**

**A.W. Pearsall, R. H. Mayeus, D.P. Mukerjee, and J.A. Albright. Reconstruction of the Posterior Cruciate Ligament With an Isometric Graft: The Effect Upon Anterior Tibial Translation. Orthopedics 23(6):567-570 (2000).**

**A.W. Pearsall. Surgical Reconstruction of the Anterior Cruciate Ligament: The Central Quadriceps Tendon as an Alternative Graft Source. www.the Sport Journal.com: Vol 3(2) (2000).**

**G. Russell, Jr., A. Pearsall, M. Caylor, and P. Nimityongskul. Acute Compartment Syndrome After Rupture of the Medial Head of the Gastrocnemius Muscle. South. Med. J. 93(2):247-249 (2000).**

G.V. Russell, Jr., and D.G. Smith. Minimally Invasive Treatment of Distal Femur Fractures: A Report of a Technique. *J. Trauma* 47(4):799-801 (1999).

**B. Articles in press.**

S. Bonsell, A.W. Pearsall, R.J. Heitman, C.A. Helms, N.M. Major, and K.P. Speer. The Relationship of Age, Gender, and Changes Observed on Shoulder Radiographs of Asymptomatic Individuals. *JBJS (British)* (2000).

J.M. Hollis, P.W. Niciforis, and A.W. Pearsall. Change in Meniscal Strain With ACL Injury and After Reconstruction. *Am. J. Sports Med.* (2000).

J.E. Kovalski, L.R. Gurchiek, and A.W. Pearsall. Musculoskeletal Injuries: Risks, Prevention, and Care. In: Jeffrey L. Roitman (Ed.) American College of Sports Medicine Resource Manual for Guidelines for Exercise Testing and Prescription. 4<sup>th</sup> Edition, Williams & Wilkins, Baltimore, MD (2000).

A.W. Pearsall and G.V. Russell, Jr. An Unusual Sports Injury Triad: Ipsilateral Clavicle Fracture, Sternoclavicular Joint Subluxation and Long Thoracic Nerve Injury: A Case Report. *JBJS (Am.)* (2000).

A.W. Pearsall and G.V. Russell, Jr. An Unusual Constellation of Injuries Sustained During Wrestling: Ipsilateral Clavicle Fracture, Sternoclavicular Joint Subluxation, and Long Thoracic Nerve Injury: A Case Report. *Am. J. Sports Med.* (2000).

M.D. Perry. Foot Compartment Syndrome. Chapter In: Orthopaedic Clinics of North America, W. B. Saunders, Publisher (2001).

G.V. Russell, Jr., M.D. Perry, and A.W. Pearsall. Heterotopic Ossification of the Adductor Longus Muscle Presenting as Dyspareunia. *Am. J. Orthop.* (2000).

G.V. Russell, Jr., M.D. Perry, and A.W. Pearsall. Intramedullary Nailing of Distal Tibia Fractures: A Technique to Prevent Malalignment. *JBJS (Am.)* (2000).

**II. PUBLISHED ABSTRACTS.**

W.C. Cottrell and A.W. Pearsall. Case Report: Simultaneous Tears of the Achilles Tendon and Medial Head of the Gastrocnemius Muscle. *Ala. Orthop. Soc. Book of Abstr.*, p. 21 (2000).

J.E. Kovaleski, R.J. Heitman, D.P.S. Andrew, L.R. Gurchiek, and A.W. Pearsall. Correlation of Isokinetic Closed and Open Kinetic Chain Strength Measurements With Functional Performance. Suppl., J. Athletic Training S-79 (2000).

B. Lumsden, G.V. Russell, Jr., A.W. Pearsall, C. May, and C. King. The Use of Daily High Dose Gentamicin for Open Tibial Fractures: A Preliminary Report. Ala. Orthop. Soc. Book of Abstr., p. 22 (2000).

R.D. Meldrum. (1) Mechanical Strength of an Uncemented Polyethylene Liner. Transactions of the American Association of Hip and Knee Surgeons, 15(2):252; and (2) The Strength of a Cemented Acetabular Locking Mechanism, 5(2):251, J. Arthroplasty (2000).

R.D. Meldrum and R.L. Johansen. Safe Screw Placement in Acetabular Revision Surgery. J. Arthroplasty 15(2):256 (2000).

R.D. Meldrum and R.L. Johansen. Safe Screw Placement in Acetabular Revision Surgery. 67<sup>th</sup> Annu. Mtg. Proc., Am. Acad. Orthop. Surg., p. 327 (2000).

R.D. Meldrum and J.M. Hollis. The Strength of a Cemented Acetabular Locking Mechanism. Ala. Orthop. Soc. Book of Abstr., p. 31 (2000).

A.W. Pearsall and K.P. Speer. Frozen Shoulder Syndrome: Diagnostic and Treatment Strategies in the Primary Care Setting. Year Book of Chiropractic Medicine, Mosby-Year Book, Inc., pp. 187-188 (2000).

A.W. Pearsall, R.E. Coles, F.M. Clements, L.A. Hey, J.A. Nunley, and L.S. Levin. Transesophageal Echocardiography in the Quantification of Emboli During Reamed vs. Unreamed Femoral Nailing. World Cong., Orthop. Sports Trauma Book of Abstr., p. 228 (2000).

A.W. Pearsall, J.M. Hollis, G.V. Russell, Jr., J. Simonds, and E. Delay. A Biomechanical Comparison of Two Different Reconstructive Techniques for Complete Disruption of the Acromioclavicular Joint. World Cong., Orthop. Sports Trauma Book of Abstr., p. 277 (2000).

A.W. Pearsall, R.F. Coles, F.M. Clements, J.A. Nunley, and S. Levin. The Use of Transesophageal Echocardiography in the Quantification of Emboli Observed During Femoral Nailing. The Comparison of Reamed vs. Unreamed Techniques. Ala. Orthop. Soc. Book of Abstr., p. 21 (2000).

A.W. Pearsall, D. Stokes, S. Bonsell, C.A. Helms, N.M. Majors, and K. Speer. The Prevalence of Age-Related Changes Observed on Shoulder Radiographs of Asymptomatic Individuals. Ala. Orthop. Soc. Book of Abstr., p. 22 (2000).

A.W. Pearsall, D. Stokes, G.V. Russell, Jr. Internal Jugular Deep Venous Thrombosis Following Open Treatment of a Humeral Nonunion: A Case Report. Ala. Orthop. Soc. Book of Abstr., p. 22 (2000).

A.W. Pearsall, D. Stokes, J.M. Hollis, G.V. Russell, Jr., J. Simonds, and E. Delay. A Biomechanical Comparison of Three Reconstruction Techniques for Disruption of the Acromioclavicular (AC) Joint. Ala. Orthop. Soc. Book of Abstr., p. 22 (2000).

G.V. Russell, Jr., B. Lumsden, and A.W. Pearsall. Once-Daily High-Dose Gentamicin for Open Tibial Fractures: A Preliminary Report. J. South. Orthop. Assn. 9(2):133-134 (2000).

D. Stokes, A.W. Pearsall, S. Bonsell, C.A. Helms, N.M. Majors, and K. Speer. Prevalence of Age-Related Changes Observed on Shoulder Radiographs of Asymptomatic Individuals. J. South. Orthop. Assn. 9(3):136 (2000).

D. Stokes, A.W. Pearsall, J.M. Hollis, G.V. Russell, Jr., and J. Simonds. Biomechanical Comparison of Three Reconstruction Techniques for Disruption of the Acromioclavicular Joint. J. South. Orthop. Assn. 9(2):136-137 (2000).

### III. BOOKS PUBLISHED.

None.

### IV. PRESENTATIONS.

M.J. Hollis. Knee Meniscus Biomechanics. 88<sup>th</sup> Annu. Mtg., Clin. Orthop. Soc., Birmingham, AL (2000).

R.D. Meldrum. Mechanical Strength of a Cemented Polyethylene Liner. Am. Assn., Hip and Knee Surg., Dallas, TX (1999).

R.D. Meldrum. Safe Screw Placement in Acetabular Revision Surgery. Am. Acad. Orthop. Surg., Orlando, FL (2000).

R.D. Meldrum. Bone Ingrowth of a Mayo Femoral Component. Annu. Mtg., Ala. Orthop. Soc., Orange Beach, AL (2000).

P. Nimityongskul. Hip Ultrasound in Pediatric Orthopaedics. Basic Concepts in Pediat. Orthop. Conf., New Orleans, LA (1999).

P. Nimityongskul. The Role of Ultrasound in Management of Developmental Dysplasia of the Hip. 67th Annu. Mtg., Am. Acad. Orthop. Surg., Orlando, FL (2000).

P. Nimityongskul. Pediatric Foot and Ankle Potpourri. 11th Annu. Mtg., Southeast. Orthop. Foot Club, Orange Beach, AL (2000).

P. Nimityongskul. Use of Ultrasound in Pediatric Hips. 88<sup>th</sup> Annu. Mtg., Clin. Orthop. Soc., Birmingham, AL (2000).

A.W. Pearsall. Isolated Articular Cartilage Lesions of the Knee and Shoulder: Surgical Options for Treatment. Visiting Sports Medicine Professor and Surgeon, U. S. Sports Acad. Int. Sports Specialist Prog., State of Bahrain (1999).

A.W. Pearsall. (1) A Biomechanical Comparison of Two Different Reconstructive Techniques for Complete Disruption of the Acromioclavicular Joint; and (2) Transoesophageal Echocardiography in the Quantification of Emboli During Reamed versus Unreamed Femoral Nailing. World Cong., Orthop. Sports Trauma, Gold Coast, Queensland, Australia (2000).

A.W. Pearsall. (1) The Prevalence of Age-Related Changes Observed on Shoulder Radiographs of Asymptomatic Individuals; and (2) The Use of Transoesophageal Echocardiography in the Quantification of Emboli Observed During Femoral Nailing: The Comparison of Reamed vs. Unreamed Techniques. Ala. Orthop. Soc. Mtg., Orange Beach, AL (2000).

A.W. Pearsall. (1) Laxity Differences in the Injured Versus Uninjured Ankle Joint Complex Using an Instrumented Arthrometer; and (2) Gender and Injury Differences in Ankle Joint Complex Laxity. 47<sup>th</sup> Annu. Mtg., Am. Coll., Sports Med., Indianapolis, IN (2000).

A.W. Pearsall. The Surgical Evolution of Treatment of Articular Cartilage Lesions: The OATS Experience at the University of South Alabama Medical Center. Visiting Professor in Sports Medicine, University of Texas El-Paso, El Paso, TX (2000).

A.W. Pearsall. Articular Cartilage Transplantation: a University of South Alabama Experience. 88<sup>th</sup> Annu. Mtg., Clin. Orthop. Soc., Birmingham, AL (2000).

M.D. Perry. Foot Compartment Syndrome. 11th Annu. Southeast. Orthop. Foot Club Mtg., Orange Beach, AL (2000).

M.D. Perry. Foot Compartment Syndrome. 88<sup>th</sup> Annu. Mtg., Clin. Orthop. Soc., Birmingham, AL (2000).

M.D. Perry. Salvage Options After Tibial Plafond Fractures. 5th Annu. Gulf Coast Orthop. Trauma Symp., Orange Beach, AL (2000).

V. Raducan. CD Horizon Instrumentation in Kaneda Configuration for Augmentation of Anterior Spinal Column Reconstruction. 49<sup>th</sup> Annu. Mtg. Ala. Orthop. Soc., Orange Beach, AL (2000).

V. Raducan. Anterior Spine Surgery for Adult Degenerative Disc Disease. 88<sup>th</sup> Annu. Mtg., Clin. Orthop. Soc., Birmingham, AL (2000).

G.V. Russell, Jr. Pilon Fractures for the Private Practitioner. Pensacola Orthop. Soc. Mtg., Pensacola, FL (2000).

G.V. Russell, Jr. Complex Midfoot Fractures. 11th Annu. Southeast. Foot Club Mtg., Orange Beach, AL (2000).

G.V. Russell, Jr. Perioperative Complications of the Kocher-Langenbeck Approach. Ala. Orthop. Soc. Mtg., Orange Beach, AL (2000).

G.V. Russell, Jr. Techniques for the Treatment of Distal Tibial Nonunions. L.D. Anderson Alumni Soc. Mtg, Perdido, AL (2000).

G.V. Russell, Jr. Treatment of Complex Malunions and Nonunions. Harborview Sci. Symp., Seattle, WA (2000).

## **V. NATIONAL PROFESSIONAL RECOGNITION.**

Dr. Mark Perry was inducted into the American Orthopaedic Foot and Ankle Society and was invited to serve as a faculty member for the AO North America. Dr. Viorel Raducan was selected to be listed in the National Registry of Who's Who in America.

## **VI. BRIEF SUMMARY OF DEPARTMENT ACTIVITIES AND PROGRESS.**

The 1999-2000 year marked the departure of two faculty physicians from the Department of Orthopaedic Surgery. Dr. Arthur Manoli, II, resigned his position as Chairman of the Department, effective November 1, 1999, and relocated to private practice in Pontiac, Michigan. Dr. Russell Meldrum, Chief of Adult Reconstructive Surgery, also resigned effective July 1, 2000, to accept a position in Indianapolis, Indiana.

On November 1, 1999, Dr. Prasit Nimityongskul, Professor and Chief of Pediatric Orthopaedics, assumed the position of Interim Chairman for the Department. Dr. Nimit has served on the faculty in the Department of Orthopaedics for the past sixteen years. His commitment to the treatment of pediatric orthopaedic disorders is evidenced by his extensive involvement in patient care, not only within the University's health care system, but also throughout the community at large. Dr. Nimit is active in research with ongoing projects focused on ultrasound in the pediatric hip and long-term follow up of clubfoot.

Dr. Albert Pearsall, Director of the Division of Sports Medicine and Shoulder Surgery, achieved promotion from assistant to associate professor during this past year. He also currently serves as a national faculty member for the United States Sports Academy in Daphne, Alabama. Dr. Pearsall is very active in research with four ongoing projects related to orthopaedic injuries of the knee, specific medication usage in the postoperative management of elderly hip fracture patients, and articular cartilage defects. During this year, he has had numerous articles published in the literature and has lectured internationally in Australia at the World Congress on Orthopaedic Sports Trauma and in the State of Bahrain, where he participated in the United States Sports Academy International Sports Specialist Program.

Dr. Mark Perry completed fellowship training in the area of foot and ankle surgery under the direction of Dr. Arthur Manoli, II. He serves as chief of this division within the department and is also medical director for clinical services in the department overseeing orthopaedic patient care in both the Health Services Foundation Clinic and the Stanton Road Clinic. During this past year, Dr. Perry was inducted into the American Orthopaedic Foot and Ankle Society and was invited to serve as a faculty member for the AO, an international association for the study of internal fixation. He served as co-chairman for the two CME meetings sponsored by the department during the year – The 11<sup>th</sup> Annual Southeastern Orthopaedic Foot Club Meeting and the 5<sup>th</sup> Annual Gulf Coast Orthopaedic Trauma Symposium. Dr. Perry's current research projects include post-operative pain control following ankle surgery and diabetic ankle research.

Dr. Viorel Raducan, Director of the Division of Scoliosis and Spine Surgery, was successful in obtaining grant funding for a study entitled "Hook Claw Construct for Instrumentation of a C<sub>1</sub>-C<sub>2</sub> Instability Model - Biomechanical Evaluation and Comparison With Other Methods," and this research project is currently in progress under his direction. The grant amount is \$26,000 cash with hardware costs provided bringing the total in excess of \$50,000. Dr. Raducan was invited to be a guest lecturer at Harvard Medical

School for a symposium on low back pain and sciatica which will be held October 12-14, 2000.

Dr. George Russell, Chief of the Division of Orthopaedic Trauma Surgery, has ongoing research projects in five areas dealing with traumatic fractures to the tibia, acetabulum and hip.

Other faculty members include J. Marcus Hollis, Ph.D., departmental research bioengineer, and Dr. Jack Reagan, who serves as a part-time associate professor in the Health Services Orthopaedics Clinic.

All faculty members of the department were selected to be speakers on the program for the Clinical Orthopaedic Society Meeting held in Birmingham, Alabama, September 13-16, 2000. Faculty members also participated as speakers on the program for the annual meeting of the Alabama Orthopaedic Society held in Orange Beach, Alabama, May 12-14, 2000, where two orthopaedic surgery residents from our program tied for 3<sup>rd</sup> place in the Residents' Essay Competition.

The department sponsored two CME events during the year; the 11<sup>th</sup> Annual Southeastern Orthopaedic Foot Club Meeting held May 11, 2000 and the 5<sup>th</sup> Annual Gulf Coast Orthopaedic Trauma Symposium held September 8-9, 2000. Both events were held in Orange Beach, Alabama.