CORNERSTONE
Orthopaedics & Sports Medicine, P.C.

B. ANDREW CASTRO, M.D., M.SC.

CURRENT EMPLOYMENT

Cornerstone Orthopaedics & Sports Medicine, P.C. — *2005 – Present*
Wheat Ridge, CO

EDUCATION AND TRAINING

Doctor of Medicine — *May, 1997*
University of South Carolina School of Medicine
Columbia, SC

Master of Science: Bioengineering — *August, 1993*
Areas of Concentration: Biomechanics, Polymeric Biomaterials
Clemson University
Clemson, SC

Bachelor of Science: Engineering Analysis — *May, 1991*
Concentration in Bioengineering
Clemson University
Clemson, SC

ACADEMIC APPOINTMENTS

Orthopaedic Spine Surgery Fellow, University of Colorado Health Science Center/Woodridge Orthopaedic and Spine Center, P.C. — *2002*
Fellowship Directors: Michael O'Brien, MD, Thomas Lowe MD.

Resident Director of Residency Research, State University of New York Health Science Center at Brooklyn; Coordinate resident research activities; Supervise all anatomic research tissue acquisition. — *1999 – 2002*

Clinical Assistant Instructor in Orthopaedic Surgery, State University of New York Health Science Center at Brooklyn. — *1998 – 2002*

Clinical Assistant Instructor in Surgery, State University of New York Health Science Center at Brooklyn. — *1997 – 1998*

Teaching Assistant, Department of Gross Anatomy, University of South Carolina School of Medicine. — *1996*

Research Assistant, Biomechanics/Biomaterials Laboratories, Department of Bioengineering, Clemson University. — *1992 – 1993*

Teaching Assistant/Lecturer, Departments of Freshman Engineering and Engineering Graphics, Clemson University. — *1991 – 1993*

BOARD CERTIFICATION

American Board of Orthopaedic Surgeons — *July 2005*

PROFESSIONAL SOCIETIES

Colorado Medical Society

American Academy of Orthopaedic Surgeons

American Medical Association

Brooklyn Orthopaedic Society

New York Organ Donor Network – Serve as consulting orthopaedic surgeon for tissue acquisition for orthopaedic research.

Police Athletic League – Served as team physician for many high school football teams, karate tournaments.

ATAN (Agrupacion Telena De Ayuda A Los Ninos) – Served as consulting orthopaedic surgeon to missionary providing surgical and non-surgical orthopaedic care to children of Tela, Honduras.

Biomedical Engineering Society (President, Clemson University Chapter 1991-1992).

USC Medical Explorers (Chairman 1996-97).

AWARDS/HONORS

John Moe Award for Best Basic Science Research.
Best Poster Presentation
Attenuation of Ciliary Neurotrophic Factor (CNTF) In Acute Spinal Cord Injury.
Scoliosis Research Society 2002, Seattle Washington.

Elected to Honors Senior Surgery – University of South Carolina School of Medicine.

Selected for Gross Anatomy Teaching Assistantship – University of South Carolina School of Medicine.

Alpha Epsilon Delta Premedical Honorary, Clemson University (1989-1991).

Edgar A. Brown Academic Scholarship, Clemson University (1986-1990).

TEACHING EXPERIENCE

The Cooper Union for the Advancement of Science and Art School of Engineering; Guest Lecturer in E.I.D. 125 - Biomechanics. Topic: Spinal Biomechanics. *1999 – 2002*

University of South Carolina School of Medicine, Department of *1996*

Gross Anatomy Teaching Assistant; Lectured first year medical students in gross anatomy.

Clemson University, Department of Freshman Engineering and Engineering Graphics Teaching Assistant/Lecturer; Taught Statics, CAD/CAM, and FORTRAN to undergraduate engineering students in classroom and laboratory settings. *1991 – 1993*

PUBLICATIONS/RESEARCH

TEXTBOOKS

1. **Haher T, Castro A, Lee C, Merola A. Biomechanics of Scoliosis Deformities. In: Modern Anterior Scoliosis Surgery. Chapter 4. Edited by L. Lenke, R. Betz, J. Harms. St. Louis, Quality Medical Publishing, 2000.**
2. **Haher T, Castro A, Merola A, Caruso S, Ottaviano D. Biomechanics. In: Textbook of the Core Curriculum for Spinal Deformity. Scoliosis Research Society. (In press).**
3. **Merola A, Castro A, Haher T, Enguidanos S. Patient Health Outcomes Following Anterior Scoliosis Surgery. In: Modern Anterior Scoliosis Surgery. Chapter 22. Edited by L. Lenke, R. Betz, J. Harms. St. Louis, Quality Medical Publishing, 2000.**

JOURNALS

1. **Merola A, O'Brien M, Castro A, Smith D, Eule J, Lowe T, Dwyer A, Haher T, Espat N. Histologic Characterization of Acute Spinal Cord Injury Treated with Intravenous Methylprednisolone. Journal of Orthopaedic Trauma 2002;16(3):155-161.**
2. **Merola A, Castro BA, et al. Anatomic Considerations for Standard and Modified Techniques of Cervical Lateral Mass Screw Placement. The Spine Journal 2002; 2(6): 430-435.**
3. **Castro A, Sands K, Use of a Stockinette in Closed Reduction of Distal Extra-Articular Tibia Fractures. American Journal of Orthopaedics 2002; Sep 31(9): 539-540.**
4. **Sands K, Castro A, An Unusual Presentation of a Medial Meniscal Tear. Orthopedics. 2003 Apr;26(4) 427-8.**
5. **Haher T, Castro A, Caruso S, Bono C, Cerabona F, et al. Biomechanics of Laminectomy and Posterior Instrumentation in Osteophytic Lumbar Spines. (Submitted for Publication).**
6. **Haronian E, Haher T, Merola A, Lenke L, Castro A, Enguidanos S. New Trends in the Treatment of Adolescent Idiopathic Scoliosis. Journal of the American Academy of Orthopaedic Surgeons (Accepted for Publication).**

PRESENTATIONS

1. **Castro BA, O'Brien M, Harms J, DeWald C, Gelb D, Flawn L, Lowe T. Traumatic Spondylolisthesis Following Instrumentation for Spinal Deformity. Colorado Spine Symposium 2002 13th Annual Meeting, Denver, CO.**
2. **Merola A, Haher T, O'Brien M, Lamba A, Castro BA, Vigna F, Mathur S. Attenuation of CNTF in ASCI Treated With Methylprednisolone. North American Spine Society 2002 17th Annual Meeting, Montreal, Canada.**
3. **Castro BA, Dwyer T, O'Brien M, Harms J, DeWald C, Gelb D, Flawn L, Lowe T. Traumatic Sacral Spondylolisthesis Complicating Instrumentation for Spinal Deformity. North American Spine Society 2002 17th Annual Meeting, Montreal, Canada.**
4. **Merola A, O' Brien M, Lamba A, Castro BA, Espat N. Attenuation of Ciliary Neurotrophic Factor (CNTF) In Acute Spinal Cord Injury. Scoliosis Research Society 2002, Seattle Washington.**

Winner: Moe Award for Best Basic Science Research.
Winner: Best Poster Presentation, 2002 SRS Meeting.

5. **Haher T, Merola A, Ottaviano D, Castro A, Camillo F, Murray M, Lee S, Vigna F. The Effect of Rod Diameter and Yield Point on Construct Stiffness in Spinal Instrumentation: A Biomechanical Investigation. International Meeting on Advanced Spine Techniques (IMAST) 2001, 8th Annual Meeting, Paradise Island Bahamas, July 12-14, 2001.**
6. **Haher T, Merola A, Yeung A, Lee D, Ottaviano D, Dugar V, Lee S, Castro A, Camillo F, Cohen-Kashi J. An In-Vitro Biomechanical Analysis of Hooks Versus Screws in Achieving Lordosis. North American Spine Society 2000, 15th Annual Meeting.**
7. **Haher T, Merola A, Castro B, Ottaviano D. Biomechanics of Long Segment Fixation: An In-Vitro Analysis of Number of Fixation Points and Construct Stiffness. Presented at Spine+Science+Management Conference, New Orleans, November 17-19, 2000.**
8. **Haher T, Merola A, Castro B, Ottaviano D, Enguidanos S. The Effects of Washers and Staples on Anterior Spinal Instrumentation Flexibility. Presented at Spine+Science+Management Conference, New Orleans, November 17-19, 2000.**
9. **Merola A, Mathur S, Castro A, Brkarik M, Kohani O, Gilbert E, Ottaviano D, Chebli C, Cerabona F, Haher T. Scoliosis Information Available on the World Wide Web: Is It Appropriate? International Meeting on Advanced Spine Techniques (IMAST) 2001, 8th Annual Meeting, Paradise Island Bahamas, July 12-14, 2001.**
10. **Merola A, Castro B, The Anatomy of Cervical Screw Placement, Presented as finalist in the SUNY Downstate Research Symposium, Brooklyn, NY, April 16, 2001.**

THESIS

1. **Castro A. Development of an Absorbable Controlled Release Analgesic Drug Delivery System. Master of Science Thesis, Department of Bioengineering, Clemson University. Advisors: Shalaby Shalaby, PhD, Dennis Powers, DVM. 1993.**

OTHER RESEARCH

1. **Castro A. Investigation of Epithelial Permigration and Cortical Bony Ingrowth into Porous Tantalum Implants in a Goat Model. Department of Bioengineering, Clemson University. Advisors: Jonathan Black, PhD, Andreas von Recum, PhD, Dennis Powers, DVM. 1992.**
2. **Castro, A. Controlled Release Drug Delivery and Polymeric Biomaterials. Department of Bioengineering, Clemson University. Advisors: Shalaby Shalaby, PhD, Dennis Powers, DVM. 1991-1993. Funded in part by Ethicon, Inc., and Reckitt-Coleman Pharmaceuticals, Inc.**

COMMUNITY SERVICE

Alpha Phi Omega – National Service Fraternity *1986 – 1993*

Brotherhood constructed housing and performed various other service projects for disabled/underprivileged in southeast.

EXTRACURRICULAR ACTIVITIES

I am active athletically and enjoy running, basketball, swimming, and mountain biking regularly. I especially enjoy playing golf and play regularly. I enjoy all types of music and have played drums for the last fifteen years.