Journal Publications
2007-2008 and 2008-2009 Academic Years


**Description**: This manuscript is an overview of the current state of the art in chiropractic including: education, research and practice. The manuscript was designed to give a practicing primary care physician both an overview of what a chiropractor does but also very practical tips on how to choose a chiropractor to refer his/her patients to.


**Description**: This cross-sectional research project addresses the potential impact of post-traumatic stress disorder on clinical outcomes of conservative forms of management for musculoskeletal disorders among veteran patients.


**Description**: This research article describes a new tool called Musculoskeletal Disorder Reporting (MSDR®), which quantifies the risk of osteoarthritis by four regions of the body.

Dr. Eric Groteke is an NYCC alumnus and adjunct faculty member in Research.
[egroteke@medappraise.com](mailto:egroteke@medappraise.com)


**Description**: This paper reviewed the advancements and patents in methods and apparatus developed to assist with closed reduction of diaphyseal fractures of long bones. Pros and cons of each approach as well as the current and future directions were also discussed.


**Description**: This paper described the development and validation of a X-ray based computer-aided method for closed tibial shaft fracture reduction. The method relies on the measurements of 12 projection parameters from an anteroposterior radiograph, a lateral radiograph, and a transverse projection photograph to calculate the adjustment requirements of a custom-made unilateral external fixation device to execute the reduction.

**Description:** This paper addressed the feasibility of using EMG-driven musculoskeletal modeling combined with in-vivo ultrasound measurement of musculotendon parameters for the prediction of voluntary elbow movement in subjects with stroke. Our simulation demonstrated that the use of in vivo subject-specific musculotendon parameters would result in better prediction as compared with the use of cadaveric data extracted from the literature.


**Description:** This case report details the identification, and management of a female patient with the underdiagnosed clinical presentation of cervical angina. This patient responded favourably to cervicothoracic, and costotransverse joint manipulation. Anecdotally, this was the first case report published by chiropractors who delivered care to a patient within the United States Veterans Health Administration.


**Description:** This study introduces a novel means by which to quantify bone healing in a mouse model of bone grafts. The ability of two types of bone grafts, Allografts and Autografts are investigated by means of Micro-CT imaging and 3D reconstruction of the bone-grate interfaces.


**Description:** Bone responds to the forces that are imposed upon it. This is commonly referred to as “Wolff’s Law.” While bone is a highly plastic tissue, responding to the environment by which it is surrounded, a great deal of the form and architecture of bone is genetically predetermined, and “Wolff’s Law” can only apply within reasonably strict limits. In this article, we demonstrate this through the study of the histology of multiple bones in human and other vertebrate skeletal material.