

SYLLABUS

Title: State of the Art Imaging in Today's Active Practice

**Dates &
Locations:**

Instructor: Alicia M. Yochum, RN, DC, DACBR, RMSK
(C.V. at end of syllabus)

CE Hours Requested: 12

I. COURSE OBJECTIVES

This program will enhance the doctor's knowledge of taking and reading imaging tools such as digital MRI, plain film, and more. It will increase his ability to properly assess and evaluate the patient's structural situation to better treat problems that affect the patient.

II. COURSE OUTLINE

- 8:00 - 9:00 am Introduction to imaging interpretation will cover the benefits of utilizing specific modalities.
1. Plain film, computed tomography, magnetic resonance imaging, nuclear medicine and diagnostic ultrasonography.
- 9:00 – 10:00 am Arthritis
1. Degenerative- osteoarthritis, erosive osteoarthritis, diffuse idiopathic skeletal hypertrophy, and neurotrophic arthritis.
 2. Inflammatory- rheumatoid, ankylosing spondylitis, psoriatic and reactive.
 3. Metabolic- gout, calcium pyrophosphate deposition disorder and hydroxyapatite deposition disorder
- 10:00 – 11:00 am Fractures
- Cervical, thoracic and lumbar spine fractures with key imaging features and mechanism of injury.
- 11:00am-12:00pm Fractures
1. Compression fracture
 2. Old compression fracture vs. new compression fracture
 3. Bone contusion or bruise
 4. Burst fracture
 5. Cord contusion
 6. Tear drop fracture
 7. Dens fractures
 8. Clay Shoveler fracture
 9. Soft tissue injury

- 12:00 - 1:00pm Systematic Approach to Bone Lesions- Tumor
Concepts of how to approach a bone tumor
- 1:00 - 2:00pm Working Lunch
Systematic Approach to Bone Lesions- Tumor
1. Periosteal reaction
 2. Pattern of bone destruction
 3. Internal matrix
 4. Cortex
 5. Location
 6. Number of lesions
 7. Soft tissue findings
- 2:00 – 3:00 pm Infections
1. The appearance of infection in the spine and appendicular skeleton will be covered with case examples on plain film and MRI.
- 3:00 – 4:00 pm Selected cases will be presented as unknowns to reinforce concepts covered and attendee will have the opportunity to test their comprehension.
- Appropriate discussion on treatment indications and contraindications
- 4:00 – 5:00 pm New Research
- A. Does altered biomechanics cause bone marrow edema?
 2. Discussion of data, clinical results and imaging findings
 - B. The effects of altered biomechanics on the presence of BME
- 5:00 - 6:00 pm Disc Lesions
1. Review of Normal Anatomy of the Lumbar Spine MRI Imaging
 2. Traditional MRI recumbent imaging of disc disease.
 3. Biomechanics of disc lesions
 - a. Predisposition from posture
 - b. Pressures within the disc in upright, recumbent and sitting positions
 - c. Flexion vs extension
- 6:00 - 7:00 pm **Performing & Ordering Tests**
- A. Review of Normal Anatomy of the Lumbar Spine MRI Imaging
 - B. Traditional MRI recumbent imaging of disc disease.
 - C. Biomechanics of disc lesions
 - a. Predisposition from posture
 - b. Pressures within the disc in upright, recumbent and sitting positions
 - c. Flexion vs extension

- D. Disc bulge
- E. Disc herniation

7:00 - 8:00 pm

Performing & Ordering Tests

- F. Weightbearing MRI
 - a. Presentation of case demonstrating disc herniations utilizing upright MRI imaging.
 - b. The Use of kinetic or dynamic flexion and extension imaging of the spine to pinpoint the patient's pain, reveal occult disc lesions and/or to demonstrate spinal instability.
- G. Spinal Stenosis
 - a. Neural foramen stenosis
 - b. Lateral recess stenosis
 - c. Central canal stenosis
 - d. Facet/synovial cyst
 - e. Degenerative spondylolisthesis

SPONSORING ORGANIZATION

Fetterman Chiropractic Events is a professional chiropractic education organization specializing in chiropractic continuing education programs. Fetterman Events has a current membership of Chiropractors across the country of approximately 3000 doctors. With over a decade of experience with chiropractic education and experience through state associations, Fetterman Events strives to provide quality educational programs to promote the chiropractic discipline and practice.

PROGRAM DIRECTOR

Alicia M. Yochum, RN, DC, DACBR, RMSK is the instructor. See attached Curriculum Vitae.

NOTIFICATION OF C.E. CREDIT

Fetterman Events sends out letters to the individual seminar attendees which certify the doctor's attendance. The letter includes information on location, dates, and approval numbers. Lists of attending doctors are available to the state licensing boards upon request. (A sample certification letter is attached)

ATTENDANCE MONITOR

During each Fetterman Events seminar, the attendees are required to sign in and out at the beginning and ending of each session. A copy of the attendance sheet is available to the state licensing board upon request. (A sample sign in/out sheet is attached)

For Online Seminar: Adobe Connect online system is used. Attendees must log in with their name, email and password. The Adobe system records their attendance and Fetterman Events receives a report of their activity. At the end of the program, the attendees must fill out an evaluation indicating levels of knowledge gained. A sample report is attached.

Fetterman Events staff is assigned to serve as proctor for the seminar to ensure that the attendance policy is maintained.