

Terry Robert Yochum, DC, DACBR, Fellow, ACCR

Dr. Terry R. Yochum is a second-generation chiropractor and a cum laude graduate of the National College of Chiropractic, where he subsequently completed his radiology specialty. He is a Diplomate of the American Chiropractic Board of Radiology and served as its Vice-President and President for seven years (1983-1990).

Dr. Yochum is currently Director of the Rocky Mountain Chiropractic Radiological Center in Denver, Colorado, and an Adjunct Professor of Radiology at the Los Angeles College of Chiropractic.



On September 27, 1996 Dr. Yochum was bestowed the honor of "**Fellow**" by the American Chiropractic College of Radiology (ACCR). He is the youngest recipient ever to receive this award, which has only been given to seven DACBR's since the inception of the ACCR in 1958. The title of **Fellow** is the highest honor awarded to any member of the ACCR for distinguished service and contributions in the advancement of chiropractic radiology. Dr. Yochum was also honored with an appointment to the Department of Radiology at the University of Colorado School of Medicine as a skeletal radiologist, where he has been on staff since January of 1991. In June of **1991, 1993, 1996, 1997, 1999 2001, 2003 and 2004**, he was unanimously voted "**Best Faculty Radiology Instructor of the Year**" by the 40 radiology residents at this university. He is the only person ever to have won this award eight times. Dr Yochum is the recipient of the "**Dr.**

Monte Greenawalt Chiropractic Excellence Award", presented in Las Vegas, Nevada, in February 2003, by Mr. Kent Greenawalt, President of FootLevelers, Inc. This award has only been given to two people in the fifty-one year history of FootLevelers, Inc.

Dr. Yochum has presented over 1,000 lectures worldwide. He has had over 200 scientific articles published in both chiropractic and medical literature. The first edition of Dr. Yochum's text, "**Essentials of Skeletal Radiology**", is a benchmark publication for the profession. This textbook sold over **45,000** copies between January of 1987 and January of 1996. It is the required text in radiology at **all 40 chiropractic colleges** worldwide and is being used in over **100 medical schools** around the world. The second edition of Dr. Yochum's textbook was released in January of 1996 at the Radiological Society of North America (RSNA) and has sold over 30,000 copies to date. The third edition of Dr. Yochum's text was released in July 2004 and has expanded to 1,900 pages with a new chapter entitled "Masqueraders of Musculoskeletal Disease."

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Yochum Chiropractic Radiology

Positioning Guide

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SKULL ROUTINE

TOWNE VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Measurement Taken From Forehead To Back Of Occipital Bone

Positioning Information:

Patient positioned AP with chin tucked. Angle tube 30° - 35° caudad. Bring tube 6-7" closer to film to maintain 40" FFD Central ray should enter at hairline and exit at external auditory means. Center film to central ray.

PA VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Measurement Taken From Forehead to Occipital Bone

Positioning Information:

Patient positioned PA, with forehead, and nose on bucky. Put top of film 1" above top of skull. Center central ray to film.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Transverse

Bucky

Measurement Taken At Mid-Parietal Bones

Positioning Information:

Patient positioned PA with slight rotation away from affected side. Affected side of skull is positioned against the bucky, with chin up slightly, Coronal plane of skull parallel to film plane. Put top of film 1" above top of skull. Center central ray to film.
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SINUS ROUTINE

CALDWELL VIEW

Focal Film Distance: 40"

Cassette Size: 8" x 10" Lengthwise

Bucky

Measurement Taken From Forehead to Top of Occipital Bone

Positioning Information:

Patient positioned upright PA with forehead and nose on bucky. Angle tube 30° caudad. Move tube 6" closer to film to maintain 40" FFD. Central ray should exit at base of nose. Center film to central ray.

WATERS VIEW

Focal Film Distance: 40"

Cassette Size: 8" x 10" Lengthwise

Bucky

Measurement Taken From Forehead to Top of Occipital Bone

Positioning Information:

Patient positioned upright PA with chin on bucky. Tilt of head should be approximately 35°. Central ray should exit at base of nose. Center film to central ray.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 8" x 10" Lengthwise

Bucky

Measurement: Taken at Mid-Parietal Bones

Positioning information:

Patient positioned upright PA with slight rotation towards unaffected side. Place affected side on bucky in true lateral position. Center central ray to corner of eye. Center central ray to film.

CHEST ROUTINE

PA VIEW

Focal Film Distance: 72"

Cassette Size: 14" x 17" Lengthwise Or Transverse

Bucky

Measurement Taken At Mid-Chest

Positioning Information:

Patient positioned PA. Put top of film slightly above shoulder. Place patient's hand on hips, and roll shoulders forward. Center central ray to film. Exposure done on full inspiration.

LATERAL VIEW

Focal Film Distance: 72"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken At Base Of Scapula

Positioning Information:

Position patient with left side of body against the film. Place hands on top of head, elevate chin, and bring elbows forward. Place top of film at level of patients shoulder. Center central ray to film. Done on full inspiration.

LORDOTIC VIEW

Focal Film Distance: 72"

Cassette Size: 14" x 17" Transverse

Bucky

Use AP Measurement

Positioning Information:

Position patient AP Have patient take two steps forward, and, then lean the patient's shoulders back against the bucky. Center central ray at level of T6. Center central ray to film. Done on inspiration.

RIB ROUTINE

UPPER RIB VIEW

(Above Diaphragm)

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken at Mid-Chest

Positioning Information:

Position patient AP. Place top of film 1" above shoulder. Center central ray to film.

Position patient so that the vertical centering line is down the mid clavicular line of the affected side. Done on full inspiration.

LOWER RIB VIEW

(Below Diaphragm)

Focal Film Distance: 40"

Cassette Size: 10" x 12" Transverse

Bucky

Measurement taken at angle of ribs

Positioning Information:

Position patient AP. Place bottom of film 1' above crest. Center film to central ray.

Position patient so that the vertical centering line is down the mid-line of the affected side. Done on expiration.

ANTERIOR OR POSTERIOR OBLIQUE VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Use AP Measurement

Positioning Information:

Position patient AP for posterior oblique. Start PA for anterior oblique. Slightly rotate patient towards affected side approximately 20°- 30°. Center central ray to mid-line, center film to central ray. Done on full inspiration.

CERVICAL SPINE ROUTINE

AP LOWER CERVICAL VIEW

Focal Film Distance: 40"

Cassette Size: 8" x 10" Lengthwise

Bucky

Measurement taken at level of C4

Positioning Information:

Patient positioned AP with chin tilted up. Angle tube 20° cephalic. Center central ray at level of C4. Center film to central ray. Collimate to include lung apices.

ODONTOID VIEW

(AP OPEN Mouth)

Focal Film Distance 40"

Cassette Size: 8" x 10" Lengthwise

Bucky

Use AP Measurement

Positioning Information:

Patient positioned AP. Open patient's mouth and adjust head to superimpose upper teeth over base of skull. Center central ray at the uvula. Center film to central ray.

NOTE: Plates and dentures should be removed.

OBLIQUE VIEW

Focal Film Distance: 72"

Cassette Size. 8" x 10" Lengthwise

Bucky

Measurement Taken At Level of C6

Positioning Information:

Position patient PA. Rotate patient 45° off PA. Raise patient's chin and rotate head to form 45° angle with body plane. Angle tube 20° caudad. Center central ray at level of C4. Center film to central ray.

CERVICAL SPINE ROUTINE

LATERAL VIEW

Focal Film Distance: 72"

Cassette Size: 8" x 10" Lengthwise

Bucky

Measurement Taken At Level Of C6

Positioning Information:

Patient positioned true lateral. Arms relaxed down, chin elevated. Place top of film at external auditory meatus (EAM). Center central ray at C6.

LATERAL FLEXION VIEW

Focal Film Distance: 72"

Cassette Size: 10" x 12" Transverse

Bucky

Use Lateral Measurement

Positioning Information:

Patient positioned true lateral. Arms relaxed down. Chin tucked against chest. Center central ray at level of C4. Center film on central ray.

LATERAL EXTENSION VIEW

Focal Film Distance: 72"

Cassette Size 10" x 12" Lengthwise

Bucky

Use Lateral Measurement

Positioning Information:

Patient positioned true lateral. Arms relaxed down. Have patient tilt head back as far as they can without any assistance. Center Ray at level of C4. Center film to central ray.

THORACIC SPINE ROUTINE

AP VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement taken at xiphoid

Positioning Information:

Position patient AP. Place top of film 1" above T1. Center central ray to film. Done on expiration. Filter upper third of beam.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken At Base Of Scapula

Positioning Information:

Position patient true lateral. Bring arms and elbows together in front of patient.

Angle tube 5° - 7° cephalic. Center Central ray at level of T7. Center film to Central ray. Done on inspiration or with breathing technique. Filter lower third of beam.

LUMBAR ROUTINE

AP VIEW

Focal Film, Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken At Level of Crest

Positioning Information:

Position patient AP. Center Central ray 1" below crest. Center film to central ray.

Done on expiration.

OBLIQUE VIEW

Focal Film. Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Use AP Measurement

Positioning Information:

Position patient PA. Rotate patient 45° off AP. Center Central ray 3" above crest.

Center film to Central ray. Done on expiration.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken at Crest Level

Positioning Information:

Position patient true lateral. Center film to Crest. Center central ray 1" above crest.

Done on expiration.

LUMBAR ROUTINE

LATERAL L5-S1 SPOT VIEW

Focal Film Distance: 40"

Cassette Size: 8" x 10" Lengthwise

Bucky

Measurement Taken 1½" below Crest

Positioning Information:

Position patient true lateral. Angle tube 7° - 10° caudad. Center central ray at bisect line of Crest and ASIS. Center film to central ray. Done on inspiration.

AP LUMBO-SACRAL SPOT VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Measurement Taken at A.S.I.S.

Positioning Information:

Position patient AP. Angle tube 25° - 30° cephalic. Center central ray to ASIS. Center film to central ray. Done on Inspiration.

PELVIS ROUTINE

AP PELVIS VIEW

Focal Film Distance: 40"
Cassette Size: 14" x 17" Transverse
Bucky
Measurement taken at Mid-Pelvis

Positioning Information:

Position patient AP. Place top of film 1" above crest. Center central ray to film. Invert feet 20°. Done on expiration.

AP HIP VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Lengthwise
Bucky
Measurement taken at Mid-Pelvis

Positioning Information:

Position patient AP. Place top of film at ASIS. Center central ray to film. Position patient so vertical centering line is down mid-line of affected side. Invert foot 20°. Suspended Respirations.

FROG LEG LATERAL HIP VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Transverse
Bucky
Use AP Measurement

Positioning Information:

Position patient AP. Bend knee of affected side up and externally rotate out to the side. Center central ray at bisect line of Crest and Symphysis Pubis. Center film to central ray. Suspended respiration.

FEMUR ROUTINE

AP VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken Mid-Femur

Positioning Information:

Position patient AP. Place bottom of film slightly below knee. Center central ray to film. Position patient so vertical centering line is down mid-line of affected side.

Instruct patient to hold still.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Bucky

Measurement Taken Mid-Femur

Positioning Information:

Position patient with affected side against bucky. Bring unaffected leg up and over affected leg. Place bottom of film slightly below knee. Center central ray to film.

Position patient so vertical centering line is down mid-line of affected side. Instruct patient to hold still.

KNEE ROUTINE

AP VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Measurement Taken Mid-Knee

Positioning Information:

Position knee AP. Angle tube 5° - 10° cephalad. Center central ray to mid-knee.

Position patient so vertical centering line is down mid-line of affected side. Center film to central ray. Instruct patient to hold still.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Measurement Taken At Mid-Knee

Positioning Information:

Position patient lateral with affected side against bucky. Angle tube 5° - 10° cephalad. Flex knee 25° - 45° slightly. Center central ray to mid-knee. Position patient so vertical centering line is down mid-line of affected side. Center film to central ray. Instruct patient to hold still.

SUNRISE VIEW

Focal Film Distance: 40"

Cassette Size: 8" x 10" Transverse

Non-Bucky

Use AP Measurement

Positioning Information:

Position patient in sitting position with heel of foot at base of table. Bend knee 35° - 45°. Angle tube cephalic. Central ray should be parallel to plane of lower leg. Center central ray to base of patella. Have patient hold film, with approximately 3" against distal femur. Instruct patient to hold still.

KNEE ROUTINE

TUNNEL VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Use AP Measurement

Positioning Information:

Position patient PA with distal femur against bucky. Flex knee approximately 45° with foot resting on stationary object. Angle tube approximately 40° or match the degree of flexion of the knee. Center central ray to popliteal surface of the knee. Center film to central ray. Instruct patient to hold still.

TUNNEL VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Non-Bucky

Use AP Measurement

Positioning Information:

Position patient in kneeling position with affected knee on center of the film. Lower leg and distal femur should create approximately 120° angle. Center central ray to popliteal surface of the knee. Instruct patient to hold still.

LOWER LEG ROUTINE

AP VIEW

Focal Film Distance: 45"

Cassette Size: 14" x 17" Diagonally

Non-Bucky

Measurement Taken Mid-Tibia

Positioning Information:

Position lower leg AP diagonally on film. Include both joints. Flex foot. Center central ray to mid-tibia. Instruct patient to hold still.

LATERAL VIEW

Focal Film Distance: 45"

Cassette Size 14" x 17" Diagonally

Non-Bucky

Measurement Taken Mid-Tibia

Positioning Information:

Position patient laterally, with affected side down. Unaffected, leg should, be brought up and over affected leg. Flex knee and foot of affected leg. Center central ray down mid-leg. Instruct patient to hold still.

ANKLE ROUTINE

AP VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Transverse
Non-Bucky
Measurement Taken Mid-Ankle

Positioning Information:

Position ankle AP. Flex foot. Center central ray to midline at ankle joint. Instruct patient to hold still.

LATERAL VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Lengthwise
Non-Bucky
Measurement Taken Mid-Ankle

Positioning Information:

Rotate lower leg laterally. Position ankle true lateral. Flex foot. Center central ray to midline at ankle joint. Instruct patient to hold still.

MEDIAL OBLIQUE VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Lengthwise
Non Bucky
Measurement taken mid ankle

Positioning Information:

Position ankle AP. Rotate medially 30°. Flex foot. Center central ray to middle at ankle joint. Instruct patient to hold still.

FOOT ROUTINE

AP VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Non-Bucky

Measurement Taken At Area of Interest

Positioning Information:

Bend knee, placing foot flat on film. Angle tube 10° - 15° degrees cephalic. Center central ray to midline of foot.

OBLIQUE VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Non-Bucky

Measurement Taken Mid-Foot

Positioning Information:

Bend knee, placing foot flat on film. Rotate lower leg, and foot internally 30°. Center central ray to midline of foot.

LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Non-Bucky

Measurement Taken At Mid-Foot

Positioning Information:

Bend knee and externally rotate. Place lateral aspect of foot on film. Flex foot. Center central ray to midline of foot.

****IF TOES ARE AREA OF INTEREST, TAKE MEASUREMENTS AT DISTAL METATARSAL. LATERAL VIEW OF TOE SHOULD BE TAKEN WITH OTHER DIGITS TAPED OUT OF THE WAY.**

CLAVICLE ROUTINE & HUMERUS ROUTINE

CLAVICLE PA VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Transverse

Bucky

Measurement Taken Mid-Clavicle

Positioning Information:

Position patient PA. Rotate chin towards unaffected side. Angle tube 15° caudal. Center central ray to midline of affected side. Center film to central ray. Instruct patient to hold still.

Humerus AP View

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Non-Bucky

Measurement Taken 1" Below Humeral Head

Positioning information:

Position patient AP. Place top of film 1" above shoulder. Abduct arm slightly and externally rotate hand. Center central ray to film and down mid-line of affected side. Instruct patient to hold still.

HUMERUS LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Transverse

Non-Bucky

Measurement: Taken 1" Below Humeral Head

Positioning Information:

Position patient AP. Abduct arm 90° to body. Bring forearm up to form 90 degree angle with humerus. Center central ray to midline of affected side. Center film to central ray. Instruct patient to hold still.

SHOULDER ROUTINE & ELBOW ROUTINE

SHOULDER AP VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Lengthwise

Bucky

Measurement Taken At Level of Humeral Head

Positioning Information:

Position patient AP. Center central ray to Glenoid Fossa. Center film to central ray.

*Internal and External rotation of hand will demonstrate different aspects of humeral head. Instruct patient to hold still.

ELBOW AP VIEW

Focal Film Distance 40"

Cassette Size: 10" x 12" Transverse

Non-Bucky

Measurement Taken At Mid-Elbow

Positioning Information:

Elevate film plane so elbow and shoulder are parallel. Position elbow AP. Supinate hand. Center central ray to mid-joint. Instruct patient to hold still.

ELBOW LATERAL VIEW

Focal Film Distance: 40"

Cassette Size: 10" x 12" Transverse

Non-Bucky

Measurement Taken at Distal Humerus

Positioning Information:

Elevate film plane so elbow and shoulder are parallel. Bend elbow to form 90° angle. Palm of hand should be facing patient. Center central ray to mid-joint. Instruct patient to hold still.

FOREARM ROUTINE

AP VIEW

Focal Film Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Non-Bucky

Measurement Taken Mid-Forearm

Positioning Information:

Elevate film plane so elbow and shoulder are parallel. Supinate hand. Center central ray to midline of affected side. Instruct patient to hold still.

LATERAL VIEW

Focal Film. Distance: 40"

Cassette Size: 14" x 17" Lengthwise

Non-Bucky

Measurement Taken Mid-Forearm

Positioning Information:

Elevate film plane so elbow and shoulder are parallel. Bend elbow to form 90° angle. Palm of hand should be facing patient. Center central ray to midline of affected side.

WRIST ROUTINE

PA VIEW

Focal Film Distance: 40"
Cassette Size: 8 x 10 Transverse
Non-Bucky
Measurement Taken Mid-Wrist

Positioning Information:

Place wrist PA on film. Center central ray to midline of affected side. Instruct patient to hold still.

LATERAL VIEW

Focal Film Distance: 40"
Cassette Size: 8" x 10" Transverse
Non-Bucky
Measurement Taken Mid-Wrist

Positioning Information:

Position wrist laterally with lateral aspect of wrist on film. Center central ray to midline of affected side. Instruct patient to hold still.

NAVICULAR VIEW

Focal Film Distance: 40"
Cassette Size: 8" x 10" Transverse
Non-Bucky
Use AP Measurement

Positioning Information:

Position wrist PA on film. Position hand in ulnar deviation position. Angle tube 15° cephalic. Center central ray to navicular bone. Instruct patient to hold still.

HAND ROUTINE

PA VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Transverse
Non-Bucky
Measurement Taken Mid-Metacarpals

Positioning Information:

Place hand PA on film. Center central ray to midline of affected side. Instruct patient to hold still.

OBLIQUE VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Transverse
Non-Bucky
Measurement Taken At Mid-Metacarpals

Positioning Information:

Place hand PA on film. Slightly rotate hand externally, keeping fingers straight. Center central ray to midline of affected side. Instruct patient to hold still.

LATERAL VIEW

Focal Film Distance: 40"
Cassette Size: 10" x 12" Lengthwise
Non-Bucky
Measurement Taken At Mid-Metacarpals

Positioning Information:

Position hand laterally on film, with lateral aspect of hand on film. Flare fingers for lateral view of digits. Center central ray to midline of affected side. Instruct patient to hold still.

*IF SPECIFIC FINGER IS AREA OF INTEREST, SAME VIEWS AND POSITIONS CAN BE USED. TAKE MEASUREMENT AT MID-DIGIT. COLLIMATE DOWN TO SPECIFIC DIGIT FOR EACH VIEW.