

# RSNA 2016 - 102<sup>nd</sup> Scientific Assembly and Annual Meeting Award Winners

## MAGNA CUM LAUDE

### BR104-ED-X Everything You Always Wanted to Know About Breast Cancer Genomics, but Were Afraid to Ask

C. M. Kuzniak, DO, Chapel Hill, NC, S. G. Jordan, MD, E. L. Langman, MD, S. S. Lee, MD, M. A. Koomen, MD

### BR179-ED-MOB8 How to Best Utilize T2-weighted MR Images of the Breast: Diagnostic Algorithm of T2-high SI Area Based on Location, Enhancement Pattern, and ADC Value

N. Onishi, MD, Kyoto JAPAN, M. Y. Kataoka, MD, PhD, S. Kanao, MD, M. Kawai, MD, M. Toi, K. Togashi, MD, PhD

### CA126-ED-X Abnormalities of the Coronary Arteries in Children: Looking Beyond the Origins

L. Saling, MD, Saint Louis, MO, K. Parekh, MD, S. Choudhry, MD, T. Rockefeller, MD, S. Bhalla, MD, E. F. Sheybani, MD

### CH105-ED-X What's in a Vein? Comprehensive Cross-sectional Imaging of the Pulmonaryvenous System

C. Hassani, MD, Los Angeles, CA, A. Wilcox, MD, R. Agrawal, MD, G. F. Greil, MD, B. Garon, MD, F. Saremi, MD

### CH112-ED-X Dynamic Chest Radiography Using Flat Panel Detector System: Technique and Applications

Y. Yamada, MD, PhD, Boston, MA, M. Ueyama, MD, PhD, T. Abe, MD, T. Araki, MD, PhD, H. Hatabu, MD, PhD, S. Kudoh, MD, PhD

### GI119-ED-TUA9 An Approach to the Diagnosis of Focal Liver Masses with CEUS

D. P. Burrowes, MD, Calgary CANADA, A. Medellin-Kowalewski, MD, A. C. Harris, MBChB, L. Milot, MD, MSc, S. R. Wilson, MD

### GI130-ED-WEA9 Fifty Shades of Intraductal Papillary Neoplasm of the Bile Duct

H. Park, S. Kim, MD, Seoul KOREA, REPUBLIC OF, H. Kim, MD, S. Lee, MD, G. Hong, MD, S. Hong

### GI227-ED-X Diseases of the Peribiliary Gland

T. Matsubara, Kanazawa JAPAN, K. Kozaka, MD, O. Matsui, MD, Y. Nakanuma, MD, S. Kobayashi, MD, W. Koda

### GI257-ED-X MR Defecography in Obstructive Defecation Syndrome: Imaging Findings and Impact on Surgical Management

S. Sud, MBBS, New Delhi INDIA, T. B. Buxi, MD, S. S. Ghuman, MBBS, MD, B. Aggarwal

### HP139-ED-TUA6 Morphological and Functional Tumor Response Assessment Criteria: A Primer for Radiologists

B. Somarouthu, MD, Boston, MA, H. Kordbacheh, MD, T. Urban, G. J. Harris, PhD, D. V. Sahani, MD, A. R. Kambadakone, MD

### IN105-ED-X Graphic Illustration for the Radiologist: An Introduction to Using Original Illustrations in Medical Education

J. L. McCarty, MD, Little Rock, AR, M. R. Skalski, DC, P. Golofit, MD

### IN116-ED-X Computational Fluid Dynamics for Patient-Specific Assessment of Blood Flow: A Step-by-Step Guide Illustrated Using CT-Based Fractional Flow Reserve (FFR-CT) as an Example

D. Mitsouras, PhD, Boston, MA, A. Giannopoulos, MD, A. Tang

### MK242-ED-X Some Strings Attached: Head to Toe Overview of Tendon Imaging

M. G. Phipo, MD, Madison, WI, K. M. Peterson, BS, J. W. Stephenson, MD

### MK289-ED-X Modern Imaging of the Brachial Plexus: Techniques and Pathologies

U. I. Salem, MBBS, MD, Houston, TX, B. Amini, MD, PhD, M. T. Truong, MD, J. E. Madewell, MD, B. W. Carter, MD

### MS004-EC-X

#### A Zoography for the Radiologist: Animal Signs in Radiology

H. Xiang, MBChB, MBBS, Sydney AUSTRALIA, L. J. Ridley, MBBS, W. Ridley, J. Y. Han, MBBS

### MS145-ED-X

#### Is it Cancer? Mimics of Malignancy in Thoraco-abdominal Imaging

M. P. Hartung, MD, M. G. Lubner, MD, Madison, WI, C. O. Menias, MD, Y. M. Mellnick, MD, S. Bhalla, MD, P. J. Pickhardt, MD

### NM143-ED-X

#### Simultaneous Time-of-flight PET/MRI: Technical Considerations, Challenges, and Potential Applications

J. Young, MD, Phoenix, AZ, G. B. Johnson, MD, PhD, A. H. Goenka, MD, E. L. Martin-Macintosh, MD, B. Kemp, PhD, K. Gornoy, PhD

### NR140-ED-X

#### Seeing is Believing: Functional Anatomy of Visual Processing in the Brain and Clinical Correlates of Lesions within this Neural System

A. M. Rauschecker, MD, PhD, Philadelphia, PA, G. Liu, S. Mohan, MD

### NR156-ED-TUB8

#### Atypical Neurocutaneous Syndromes: Clinicoradiological Approach to Diagnosis

F. Scortegagna Sr, MD, Sao Paulo BRAZIL, L. F. Amaral, MD, A. J. da Rocha, MD, PhD, F. G. Goncalves, MD, N. Saba, L. F. Freitas, MD

### NR194-ED-WEA10

#### Face of The Unborn: Evaluation of Fetal Facial Anomalies with MRI

K. G. Sharbidre, MD, Chicago, IL, M. Nagarajan, MD, FRCR, R. M. Sheth, S. H. Bhabad, MD, FRCR, X. Pombar, MD, S. E. Byrd, MD

### NR331-ED-X

#### A Decade of Learning of Neuromyopathies Optica: A Wide Spectrum of Imaging Presentations and Their Differential Diagnosis

B. G. Dutra, Sao Paulo BRAZIL, A. J. da Rocha, MD, PhD, R. Hoffmann Nunes, MD, T. P. Scopetta, MD, A. C. Maia Jr

### OB170-ED-THB2

#### The New 2014 World Health Organization (WHO) Classification of Ovarian Cancer: A Primer for Radiologists

F. S. Amanullah, MD, Houston, TX, V. Tammisetti, MD, P. T. Valente, MD, C. O. Menias, MD, S. R. Prasad, MD, V. S. Katabathina, MD

### PD135-ED-X

#### Imaging Findings of Childhood Interstitial Lung Disease (chILD) in Young Children

A. Schapiro, MD, Cincinnati, OH, M. S. Rattan, MD, E. J. Crotty, MBBS

### PD192-ED-MOB8

#### The CNS Intrauterine Zika Virus Infection Manual: Perinatal US, MR and CT Imaging Findings

B. Guedes Ribeiro, MD, Rio de Janeiro BRAZIL, H. Werner, MD, L. H. Da Cruz, MD, T. M. Fazecas, MD, P. Dalro, MD, R. A. Nogueira, MD

### UR106-ED-X

#### Beyond Kidney: Imaging for Systemic Diseases Affecting the Kidney. Where the Kidney Meets the Others?

T. Tanaka, MD, Okayama JAPAN, R. Inai, MD, Y. Marukawa, MD, A. Tada, H. Gohara, MD, S. Hashimura, MD

### UR181-ED-X

#### A Practical Guide to Prostate Magnetic Resonance Analysis: A Step-by-Step to Detecting Lesions

V. R. Dos Santos Junior, MD, Sao Paulo BRAZIL, A. R. Souza, MD, D. d. Romao, MD, T. C. Lima, T. R. Yamanari, MD, N. d. Horvat, MD

### VI102-ED-X

#### IR Management of Complications of Laparoscopic Pancreaticoduodenectomy

D. A. Rigual, MD, Denver, CO, R. Schulick, MD, MBA, B. H. Edil, MD, P. J. Rochon, MD

### VI211-ED-X

#### Frozen Bones: Multimodality Imaging Appearance after Cryoablation of Bone Tumors

A. N. Kurup, MD, Rochester, MN, A. Packard, MD, S. M. Broski, MD, J. J. Schmitz, MD, J. M. Morris, MD, T. D. Atwell, MD

## CUM LAUDE

### BR111-ED-SUB6

#### Lesion Localization Using the Scroll Bar on Tomosynthesis: Why Doesn't It Always Work?

S. M. Friedewald, MD, V. A. Young, MD, Chicago, IL, D. Gupta, MD

### BR201-ED-X

#### Beyond BRCA: Current High Risk Screening Recommendations in the Era of Multigene Panel Genetic Testing

W. C. Hedegard, MD, Rochester, NY, J. Salamone, MS

### BR203-ED-X

#### Lost in Lactation: Imaging Evaluation of the Breastfeeding Woman

N. Kannan, MD, San Francisco, CA, A. Y. Lee, MD, B. M. Carpentier, MD, K. M. Ray, MD, B. N. Joe, MD, PhD

### BR211-ED-X

#### Contrast-Enhanced Spectral Mammography: A Systematic Guide to Interpretation

H. Perry, MD, Boston, MA, J. Phillips, MD, V. M. Dialani, MD, P. J. Slanetz, MD, MPH, V. J. Fein-Zachary, MD, E. Karimova, MD

### BR212-ED-X

#### Medical Legal Aspects of Breast Imaging: Practical Advice for Mammography Interpretation

K. R. Gundry, MD, Atlanta, GA

### CA135-ED-WEA8

#### Fibrous Skeleton of the Heart: Comprehensive Anatomical Overview and Evaluation of Pathologies Using Cardiac CT and MR

F. Saremi, MD, Los Angeles, CA, C. Hasani, MD, D. Spicer, S. Mori, D. Sanchez-Quintana, MD, R. Anderson, MD

### CA139-ED-X

#### MRI of Hypertrophic Cardiomyopathy: Phenotypes and Phenocopies

C. Mendez, MD, S. A. Otero Muinelo, MD, A. Coruna SPAIN, T. Perez Ramos, MD, R. Soler, MD, E. Rodriguez, MA, R. Barriales Villa

### CA147-ED-MOB9

#### Demystifying the Mitral Valve: Practical Anatomy for Radiologists

D. Levin, Seattle, WA, M. M. Ramos, E. Perpetua, PhD, RN, G. B. Mackensen, MD, PhD, M. Reisman, MD, B. A. Ripley, MD, PhD

### CH102-ED-X

#### Thoracic Complications of Precision Cancer Therapies: A Practical Guide for Radiologists in the New Era of Cancer Care

M. Nishino, MD, MPH, Boston, MA, H. Hatabu, MD, PhD, N. H. Ramaiya, MD

### CH122-ED-X

#### Choosing the Right Target: Role of SBRT in Management of Lung Cancer and Oligometastatic Disease in Lung Cancer

J. A. Febbo, Chicago, IL, R. S. Gaddikeri, MD, P. N. Shah, MD

### CH150-ED-X

#### Infectious Respiratory Emergencies: HRCT Findings and Differential Diagnosis

T. C. Franquet, MD, Barcelona SPAIN, M. L. Rosado De Christenson, MD, E. Marchiori, MD, PhD, S. Martinez-Jimenez, MD, A. M. Gimenez, MD, G. S. Meirelles, MD, PhD

### CH171-ED-THA8

#### Added (Lab) Value: Serum Markers and Lung Disease

D. A. Raptis, MD, T. S. Henry, MD, S. Bhalla, MD, A. B. Wallace, MD, Saint Louis, MO

### CH227-ED-X

#### Evolving Immunologic Evidence in Rheumatoid Arthritis: The Lungs, Culprit or Victim?

K. Capel, MD, Madison, WI, C. A. Meyer, MD, J. P. Kanne, MD

### ER114-ED-X

#### Radiology Reflexes: When Recommending Another Study is Required for a Complete Diagnosis

M. H. Scheinfeld, MD, PhD, Bronx, NY, R. J. Dym, MD, M. Spektor, MD

### ER119-ED-X

#### Hip Dislocations in the Emergency Department: What the Orthopedic Surgeon Needs to Know

J. C. Mandell, MD, Waltham, MA, R. A. Marshall, MD, M. Weaver, MD, M. A. Harris, PhD, A. D. Sodickson, MD, PhD, B. Khurana, MD

### GI120-ED-X

#### What's Your Gut Feeling? Acute, Emergent and Post-Surgical Disorders or Complications Involving the Jejunum

D. D. Brahee, MD, Pittsburgh, PA, D. C. Monks Jr, MD, M. S. Hartman, MD, P. R. Klepchick, MD, R. K. Maheshwary, MD, K. Ilkhanipour, MD

### GI166-ED-X

#### A Bump in the Wall—Palpable Masses in the Abdominal Wall

N. Dahiya, MD, Saint Louis, MO, M. D. Sugi, MD, S. W. Young, MD, M. D. Patel, MD, Y. M. Lopez-Alvarez, MD

### GI172-ED-X

#### Imaging Features of Crohn Disease: Correlation of Ultrasound and MR-Enterography

T. Ripolles, MD, Valencia SPAIN, G. Martin, MD, M. Martinez-Perez, MD, F. Delgado, MD, J. Vizuet, J. M. Paredes, MD, PhD

### GI190-ED-X

#### Focal Liver Lesion Assessment with Contrast-enhanced Ultrasound (CEUS) and CEUS LI-RADS (Liver Imaging Reporting and Data System)

A. M. Veziridis, MD, PhD, La Jolla, CA, Y. Kono, MD, PhD, D. O. Cosgrove, MBBS, FRCR, C. F. Dietrich, MD, H. Jang, MD, A. R. Kambadakone, MD

### GI245-ED-X

#### Unintended Consequences: A Pictorial Review to Identifying Surgical and Post-endoscopy Biliary Intervention Complications

J. C. DeMarco, DO, Valhalla, NY, K. Scherer, DO, T. Chao, MD, S. K. Calhoun, DO, T. M. Yablonsky, MD, S. Sosin, DO

### GI304-ED-X

#### Flat and Serrated Colorectal Lesions at CT Colonography: Appearance, Relevance, Pitfalls

A. R. Cahoon, MD, D. H. Kim, MD, M. G. Lubner, MD, Madison, WI, P. J. Pickhardt, MD

### GI332-ED-X

#### Vascular Compression Syndromes in Abdomen and Pelvis: Current Concepts and Controversies

A. Salei, MD, Darby, PA, V. Gowdra Halappa, MD, K. H. Schuleri, MD, O. Teytelboym, MD, S. U. Chan, MD

### GI333-ED-X

#### CT Spectrum of Small Bowel Gastrointestinal Stromal Tumors

S. Dolan, MD, Rochester, MN, R. Vasconcelos, MD, S. Hansel, MD, M. Miller, J. G. Fletcher, MD, J. M. Barlow, MD

### GI335-ED-X

#### Focal Hepatic Lesions; Pitfalls, Pseudolesions and Misdiagnoses

K. M. Elsayes, MD, Ann Arbor, MI, J. Szklaruk, MD, PhD, R. L. Baron, MD

### HP105-ED-SUA4

#### Categorizing Errors in Abdominal Imaging: Lessons Learned from Quality Assurance Conference

T. E. Pendergrast, MD, Winston-Salem, NC, R. Tappouni, MBBS, FRCPC

### HP115-ED-X

#### MRI in Patients with MR-unsafe Cardiac Implantable Electronic Devices (CIEDs): Clinical Indications and Reimbursement Issues

J. Cavallo, MD, New Haven, CT, Y. R. Zhang, R. Lampert, J. C. Weinreb, MD

### HP137-ED-X

#### From CTDIvol and DLP to SSDE and ICRP 103: CT Radiation Dose Measurement and Reporting Simplified

J. Starkey, MD, Tokyo Japan, Y. Kurihara, MD

### IN111-ED-MOB7

#### Deep Learning: A Primer for Radiologists

G. Chartrand, BEng, Montreal CANADA, E. Vorontsov, M. Flamand, S. Turcotte, C. Pal, PhD, S. Kadoury

### MK110-ED-X

#### Sonography of the Radial Nerve: From the Top to the Bottom

V. Creteur, MD, Sautour BELGIUM, A. Madani, MD, PhD

### MK116-ED-X

#### The Normal Subchondral Bone and Common Elementary Changes: High Resolution MRI and $\mu$ CT with Macroscopic Anatomical Correlations in Resected Human Femoral Heads

C. Mourad, MD, Brussels BELGIUM, C. Galant, MD, P. Michel, MD, M. Van Cauter, MD, D. POSTLETHWAITE, MD, K. Laperre

### MK121-ED-X

#### Beyond Valley Fever: Imaging of Musculoskeletal Disseminated Coccidioidomycosis

T. R. Fischbeck, DO, Los Angeles, CA, G. R. Matcuk Jr, MD, E. A. White, MD, A. Schein, MD, A. Tomasian, MD, S. Masih, MD

### MK139-ED-X

#### Imaging of Below the Knee Amputation: Expected Post-operative Appearance and Potential Complications

B. Lowrey, MD, Hershey, PA, C. Gustas, MD, S. A. Bernard, MD, J. M. Petscavage-Thomas, MD, MPH, J. S. Reid, MD

### MK180-ED-X

#### Ischialgia: Imaging Review of Pain Related to the Ischial Tuberosity

S. Faruqi, MD, Iowa City, IA, R. U. Shah, MD, M. Bajaj, MBBS, MD, G. Y. El-Khoury, MD, K. Ohashi, MD, M. Hall, MD

### MK193-ED-X

#### How to Wash the Pain Away: Ultrasound-Guided Lavage for the Treatment of Calcific Tendinitis of the Shoulder

J. I. Blaichman, MD, Madison, WI, S. Sheehan, MD, J. J. Wilson, MD, MS, K. S. Lee, MD

### MK218-ED-X

#### Stress Fractures of the Foot and Ankle: Imaging and Management

J. C. Mandell, MD, Waltham, MA, B. Khurana, MD, C. Chiodo, MD, S. E. Smith, MD

### MK241-ED-THB9

#### Tendon Pathology on MRI: Pulling it all Together

K. M. Hanley-Knutson, MD, Winston Salem, NC, P. Thotakura, MD, S. D. Wuertzer, MD, MS

### MK252-ED-X

#### Soft Tissue Tumor Signatures with MRI

J. D. Stevens, MD, Temple, TX, R. D. Garza-Gongora, MD, L. M. Parman, MD, C. C. So, MD

### MS107-ED-X

#### Perineural Invasion in Abdominal and Pelvic Malignancies: Anatomy, Evolving Concepts and Imaging Patterns

V. Tammisetti, MD, Houston, TX, A. K. Dasyam, MD, V. S. Katabathina, MD, C. O. Menias, MD

### MS108-ED-X

#### What Every Radiologist Should Know about Peritoneal Metastases: A Correlation of Radiological, Surgical and Pathological Findings

J. Miguez Gonzalez, MD, Barcelona SPAIN, F. Calaf, MD, L. Pelegri-Martinez, MD, P. Lozano Arranz, MD, V. Fuste Chimisana, MD, M. Ramos Bernado, MD

### MS116-ED-X

#### Imaging of IgG-4 Related Diseases with Clinicopathologic Correlation

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## RSNA 2016 Award Winners

CONTINUED FROM PREVIOUS PAGE

### NR158-ED-X

**2016 Updates to the World Health Organization (WHO) Brain Tumor Classification System: What the Radiologist Needs to Know**

D. R. Johnson, MD, Rochester, MN, J. B. Guerin, MD, C. Giannini, MD, PhD, P. P. Morris, MBChB, J. M. Morris, MD, T. J. Kaufmann, MD

### NR168-ED-X

**Back to Basics: Understanding the Developmental Basis of Pathology Affecting the Central Skull Base and Craniocervical Junction**

P. A. Dvorak, MD, Pittsburgh, PA, V. Agarwal, MD, W. Rothfus, MD, T. J. Rath, MD

### NR170-ED-X

**Vascular Variants in Head and Neck Imaging: Embryological Basis and Radiological Findings**

K. G. Sharbidre, MD, V. D. Bachhav, MBBS, S. G. Dua, MD, Chicago, IL, M. D. Jhaveri, MD, S. E. Byrd, MD

### NR171-ED-X

**Punctate Pattern: A Promising Imaging Marker for the Diagnosis of Brain Disorders**

J. Hodel, Paris FRANCE, B. Bapst, S. M. Toledano-Massiah, O. Outteryck, M. Zins, MD, V. Deramecourt

### NR178-ED-X

**A Radiologist's Background to the Techniques and Scales Used in the 2015 Endovascular Stroke Trials and the Updated AHA/ASA Guidelines for Endovascular Stroke Treatment**

M. H. Scheinfeld, MD, PhD, Bronx, NY, D. A. Krieger, MD, R. Zampolin, MD, D. P. Bhupali, MD, A. J. Erdfarb, MD

### NR199-ED-WEB9

**Pocket Guide for DWI and DTI Derived Biomarkers in CNS: Pathophysiological Basis and Clinical Meaning from ADC to Kurtosis**

T. Martin, MD, Jaen Spain, J. P. Martinez Barbero, MD, PhD, A. Luna SR, MD

### NR300-ED-X

**An Illustrated Guide to Intraspinal Cystic Lesions**

M. R. Skalski, DC, Whittier, CA, W. N. Gibbs, MD, MA, G. R. Matcuk Jr, MD

### OB116-ED-WEB1

**Fetal GI Tract Atresias – From Esophagus to Anus**

T. Gibson, MD, Portland, OR, K. Jensen, MD, N. Jafarian, MD, R. Sohaey, MD, K. Y. Oh, MD

### OB122-ED-X

**“Don’t Miss Uterine Pathology!”: An Interactive Multimodality Imaging Case Based Review**

Y. Lee, MD, Los Angeles, CA, D. K. Walker, MD

### OB167-ED-WEB2

**Algorithmic Approach to Evaluation of Sonographically Indeterminate Adnexal Masses Using Multi-Parametric MRI**

F. Shiota, MD, PhD, New York, NY, S. Nougaret, MD, S. Fujii, MD, C. O. Menias, MD, H. Vargas, MD, H. Hricak, MD, PhD

### PD154-ED-WEA7

**Imaging of the Pediatric Hypothalamic-Pituitary Axis: A Pictorial Review of Developmental, Infiltrative and Tumoral Pathology**

J. Patel, MD, Boston, MA, V. Silvera, MD, MS

### PD158-ED-X

**Urosonography: Experience and Difficulties in Its Introduction to Our Hospital**

C. Garcia Vera, MD, Terrassa SPAIN, I. Romero Novo, C. Duran, MD, L. Esteba, MD, B. Del Rio Carrero, MBBS

### PD183-ED-X

**US Approach of Small Bowel Thickening in Children**

J. Bolivar, MD, Montpellier Cedex 5 FRANCE, M. Saguintaah, MD, O. Prodhomme, MD, I. Taleb Arrada, S. David, MD, C. Baud, MD

### PD196-ED-SUB8

**Current and Future Directions in Pediatric PET/MRI**

M. R. Pontiso, MD, St. Louis, MO, J. E. McConathy, MD, PhD, G. Khama, MD, MS

### PH104-ED-X

**A Pictorial Review of Digital Radiography Artifacts**

K. T. Brossoit, BS, ARRT, Rochester, MN, D. Magnuson, RT, B. A. Schueler, PhD, A. Walz-Flannigan, PhD

### PH123-ED-X

**Material Decomposition using Dual Energy and Spectral CT: Principles, Physics and Clinical Applications**

R. W. van Hamersvelt, MD, Utrecht NETHERLANDS, A. Vlassenbroek, PhD, M. J. Willemink, MD, PhD, A. Schilham, PhD, P. A. De Jong, MD, PhD, T. Leiner, MD, PhD

### UR122-ED-TUA7

**CT Cystography: When to Do It, How to Do It, and What to Look for When Traumatic Urinary Bladder Injury is Suspected**

G. Joshi, MD, E. Y. Kim, MD, Saint Louis, MO, T. N. Hanna, MD, C. O. Menias, MD, A. O. Levey, MD, C. L. Siegel, MD

### UR153-ED-X

**Differentiation of Renal Tumors with Multiparametric MRI Approach**

C. L. Vendrami, C. Parada Villavicencio, MD, Chicago, IL, A. Chatterjee, MBBS, MD, P. Nikolaidis, MD, V. Lewis, MD, D. D. Casalino, MD

### VI107-ED-X

**Don't Break My Heart: A Pictorial Review of Vascular Complications from Transcatheter Valve Replacement**

K. Scherer, DO, Morristown, NJ, J. C. DeMarco, DO, S. K. Calhoun, DO, T. M. Yablonsky, MD, C. Boyd, MD, C. Boyd, MD

### VI128-ED-X

**Intra-Arterial Chemotherapy of Retinoblastoma with a Focus on What Interventional Radiologists Should Know**

H. Ghanaati, MD, R. Pourghorban, MD, Tehran Iran, M. Jalilvand, F. Ghassemi, R. Salouti, M. Zarei

### VI145-ED-X

**Screening Ultrasound of Peripheral Arterial Disease: A Radiologist's Survival Guide**

M. Callaghan, MD, Philadelphia, PA, J. Cruz, MD, C. E. Kim, MD, S. K. Rodgers, MD, M. M. Morrow, MD

### VI151-ED-X

**Role of Interventional Radiology in Postpartum Hemorrhage: Let's Give Mothers a Second Chance**

A. Ugarte Nuno, MBBS, San Sebastian SPAIN, A. Goienetxea Murgiondo, MD, E. Garmendia Lopetegui, F. Loyola Ech-aniz, I. Echeogoyen, V. Gomez Usabiaga

### VI155-ED-WEB8

**Portal Vein Embolization: “Who, What, Where, When, Why, and How”**

D. B. Gans, MD, Cleveland, OH, J. Davidson, MD, E. D. McLoney, MD, S. Tavri, MBBS, C. M. Sutter, MD, I. J. Patel, MD

## CERTIFICATE OF MERIT

### BR132-ED-X

**Multimodality Imaging of the Nipple Areolar Complex (NAC) – Pathologies, Pearls, and Pitfalls**

R. D. Sarmiento, MD, New Hyde Park, NY, S. A. Berry-Tony, MD, E. Gupta, MD, S. McElligott, MD

### BR147-ED-X

**Shed a Little Light on This: Technical Aspects and Applications of Optical Mammography in Breast Imaging**

S. Kalli, MD, Boston, MA, P. G. Anderson, BEng, S. Cohen, MD, S. S. Makim, MD, S. Fantini

### BR148-ED-X

**Breast Cancer Recurrence in the Post-Operative Breast: Pearls and Pitfalls**

M. B. Reddy, MD, Morrisville, NC, S. G. Jordan, MD, S. S. Lee, MD, C. M. Kuzmiak, DO, M. A. Koomen, MD, E. L. Langman, MD

### BR150-ED-X

**Technologists as Partners: Beyond the Call of Duty in Breast Imaging and Quality Assurance**

R. Tai, MD, Boston, MA, S. A. Chikarmane, MD, C. S. Giess, MD

### BR151-ED-X

**Are We There Yet? A Review of Abbreviated Breast MRI Protocols and Their Potential Impact on Clinical Practice**

G. M. Rutledge, MD, Boston, MA, D. A. Sippo, MD, P. A. Dang, MD, T. Witzel, S. Risacher, C. D. Lehman, MD, PhD

### BR159-ED-X

**Breast Cancer High Risk Patients: What the Radiologist Should Know**

L. F. Chala, MD, Sao Paulo BRAZIL, G. G. Mello, PhD, C. Shimizu, MD, M. M. Stiepcich, MD, PhD, P. F. Doin, N. Barros

### BR166-ED-X

**Inappropriate use of BI-RADS Category 3: ‘An Expert is a Person Who has Made all the Mistakes That Can be Made in a Very Narrow Field.’**

S. G. Mizuguchi, MD, S. M. Crawford, MD, L. M. Roland, MD, J. Messinger, MD, Louisville, KY

### BR167-ED-X

**Pathologic Results of Digital Breast Tomosynthesis (DBT) Guided Biopsies of 3D Only Detected Architectural Distortions and Upgrade Rate at Surgery**

S. Alshora, MD, Burlington, MA, J. Y. Chun, MD, A. L. Hartman, MD, MS, M. Sekar, MD, M. R. McSweeney, DO, C. M. Kim, MD

### BR176-ED-SUB7

**Strengths and Shortcomings of Synthetic Mammography (SM): Review of C-View Physics, Artifacts, and Comparison with Full Field Digital Mammography (FFDM)**

L. Ratanaprasatporn, MD, Boston, MA, S. A. Chikarmane, MD, C. S. Giess, MD

### BR178-ED-MOA8

**Breast Imaging in the Transgender Patient: Traversing New Terrain**

B. M. Carpentier, MD, San Francisco, CA, J. H. Hayward, MD, K. D. Maglione, MD, L. M. Strachowski, MD

### BR192-ED-TUA9

**Enhancing Foci on Dynamic Breast MRI: What Should be our Diagnostic Strategy?**

M. Goto, MD, Kyoto JAPAN, M. Kiba, K. Sakai, M. Yoshida, K. Yamada, MD

### BR199-ED-TUB9

**Prediction the Likelihood of Malignancy According to Morphological Analysis of Phylloides Tumor in Breast MRI**

O. Woo, MD, Seoul KOREA, REPUBLIC OF, G. Choi, MD, H. Shin, A. Park, MD, S. Song, MD, K. Cho, MD, PhD

### BR200-ED-X

**Tomosynthesis-Guided Biopsy: A Procedural Review**

K. D. Maglione, MD, New York, NY, J. H. Hayward, MD, B. M. Carpentier, MD, L. M. Strachowski, MD

### BR202-ED-X

**Concordant or Discordant? Making Sense of the Breast Core Biopsy Pathology Alphabet Soup**

D. Ataya, MD, Cleveland, OH, S. K. Miller, MD, L. Dean, MD, L. K. Steck, MD, G. Zhang, W. M. Shaw, MD

### BR205-ED-X

**Pregnancy Associated Breast Cancer: What the Radiologist Should Know?**

A. Wadhwa, MD, Milwaukee, WI

### BR206-ED-WEA9

**Evaluation of Response to Neoadjuvant Chemotherapy on Breast MRI: Illustrative Depiction of Enhancement Pattern Response with Pathologic Correlation**

R. Verma, MD, Ottawa CANADA, M. D. Mahajan, MBBS, Z. Kos, J. M. Seely, MD

### BR207-ED-X

**Symptomatic Mastectomy Patients: Imaging Approach and Findings**

C. M. Chhor, MD, Brooklyn, NY, S. Lee, C. L. Mercado, MD

### BR208-ED-X

**Mammographic-Sonographic and Breast MR Imaging-Sonographic Correlation: Pearls and Pitfalls**

T. Uematsu, MD, PhD, Nagaizumi JAPAN

### BR214-ED-X

**Axillary Lymph Node Disorders - Beyond Breast Tumor Metastasis**

J. H. Catani, MD, Sao Paulo BRAZIL, F. T. Horigome, MD, F. T. Horigome, MD, M. A. Costenaro, MD, V. C. Ferreira, MD, N. Barros

### BR215-ED-X

**If You Don't See It, Is It Really There? Case-based Multimodality Review of Technical and Operator Pitfalls Resulting in Missed Breast Cancers**

W. Tu, MD, R. Verma, MD, Ottawa CANADA, J. M. Seely, MD

### CA104-ED-SUA6

**Cardiac Lymphomas: Spectrum of Cardiovascular Magnetic Resonance Features with Histological Correlation**

M. Arzanauskaitė, London UNITED KINGDOM, R. Mohiaddin

### CA107-ED-X

**Total Artificial Heart Implantation: Imaging of the Bridge**

P. V. Patil, MD, FRCR, London UNITED KINGDOM, P. N. Mohite, MChir, MRCS, A. R. Simon, MD, T. K. Mittal, MD, FRCR

### CA109-ED-SUB6

**A Winding Road: The Spectrum of Coronary Artery Anomalies**

L. Azour, MD, New York, NY, A. Jacobi, MD, J. Sanz, MD, G. Larocca, R. Chang, MD, M. D. Cham, MD

### CA127-ED-X

**Myocardial Strain Imaging by Cardiac Magnetic Resonance: Techniques and Clinical Applications**

S. Oda, MD, Kumamoto JAPAN, D. Utsunomiya, MD, K. Morita, T. Matsubara, T. Nakaura, MD, H. Yuki, MD

### CA136-ED-SUA7

**Role of Cardiac CT in the Work Up Prior to Percutaneous Pulmonary Valve Implantation**

M. Tezza, MD, Verona ITALY, M. Witsenburg, K. Nieman, MD, PhD, P. van de Woestijne, R. P. Budde, MD, PhD

### CA137-ED-SUB7

**CT Imaging after the Bentall Procedure: An Updated and Comprehensive Guide**

S. Boccacini, MD, Genova ITALY, L. E. Swart, MD, J. A. Bekkers, K. Nieman, MD, PhD, G. P. Krestin, MD, PhD, A. J. Bogers, MD, PhD

### CA146-ED-X

**Comprehensive Review of Coronary Artery Fistula from Beginning to End: Pathophysiology, Spectrum of Imaging Findings and Management**

G. Yun, MD, Seongnam-si KOREA, REPUBLIC OF, T. Nam, J. Kim, J. Hur, MD, E. Chun, MD, PhD

### CA152-ED-X

**Multimodality Imaging of Cardiovascular Infections**

H. Goerne Ortiz, A. N. Khan, MD, P. Rajiah, MD, FRCR, Dallas, TX

### CA153-ED-X

**Comprehensive Role of MRI in Multimodality Evaluation of the Right Ventricle- A Case-based Review of Algorithmic Approach**

C. Maroules, MD, P. Joshi, S. Matulevicius, MD, J. W. Wachsmann, MD, P. Rajiah, MD, FRCR, Dallas, TX

### CA155-ED-X

**Contrast Dose Reduction Strategies in Pre-TAVR CTA: Matching the Appropriate Dose to the Correct Patient**

E. Sheedy, Rochester, MN, N. Weber, C. Walfover, E. E. Williamson, MD, S. Leng, PhD, A. Halaweish, PhD

### CH004-EB-X

**The Imaging Spectrum and Longitudinal Changes of Pulmonary Artery Sarcoma (PAS) Masquerading Pulmonary Thromboembolism (PTE): The Multimodality Imaging Access**

C. Kim, MD, Seoul KOREA, REPUBLIC OF, M. Kim, MD, PhD, J. Kang, MD

### CH011-EB-X

**Role of CT on Bronchoscopic Treatment of COPD**

D. O. Carvalho, MD, Sao Paulo BRAZIL, G. B. Teles, MD, H. Shoji, MD, G. Scharf, MD, R. C. Chate, MD, M. B. Funari, MD

### CH100-ED-X

**New Kids on the Block: Contemporary Review of Monitoring and Therapeutic Devices in the Chest**

D. Vargas, MD, Denver, CO, T. D. Suby-Long, MD, N. L. Restauri, MD, D. Ocacionez, MD, T. J. Bang, MD, C. S. Restrepo, MD

### CH103-ED-X

**Proposed Revisions to the TNM Staging System (TNM-8) for Lung Cancer: Rationale, Significance, and Clinical Application**

B. W. Carter, MD, Houston, TX, J. P. Lichtenberger III, MD, M. K. Benveniste, MD, C. C. Wu, MD, P. M. de Groot, MD, M. T. Truong, MD

### CH119-ED-SUA5

**Approach to Pulmonary Hypertension: From Imaging to Clinical Diagnosis**

F. Aluja, MD, Bogota COLOMBIA, F. G. Diaz Telli, MD, S. Yevenes Aravena, MD, S. Sridhar, MD, F. R. Gutierrez, MD, S. Bhalla, MD

### CH125-ED-X

**Ferumoxylol-Enhanced Thoracic MRA: Pictorial Review of Routine and Novel Clinical Applications**

A. V. Berniker, MD, K. G. Kallianos, MD, San Francisco, CA, T. S. Henry, MD, K. G. Ordovas, MD, T. A. Hope, MD, M. D. Hope, MD

### CH140-ED-X

**Smoking Related Interstitial Lung Disease: A Puzzling Problem in Interstitial Pneumonias**

T. Iwasawa, MD, PhD, Yokohama JAPAN, T. Takemura, MD, PhD, T. Baba, MD, T. Ogura, MD, T. Gotoh, PhD

### CH143-ED-X

**Fundamentals of Dynamic Chest Radiography: Low-cost and High Performance Functional Imaging**

R. Tanaka, PhD, Kanazawa JAPAN, S. Sanada, PhD, I. Matsumoto, K. Kasahara, MD, PhD, K. Sakuta, RT, Y. Kishitani

### CH144-ED-MOB6

**Don't Be Nervous: An Overview of the Anatomy and Pathology of the Nerves of the Thorax**

R. Agrawal, MD, Chicago, IL, N. D. Parekh, MD, H. Savas, MD, L. Cochard, E. M. Hart, MD

### CH149-ED-TUB6

**Added Value of Functional Lung MRI for Improved Patient Care: Current Techniques and Future Perspectives**

J. Renne, MD, Hannover GERMANY, T. F. Kairait, C. O. Schoenfeld, MD, C. P. Czerner, MD, A. Voskrebenez, M. Gutberlet, Dipl Phys

### CH153-ED-X

**Lung-RADS™: Pushing the Limits**

M. D. Martin, MD, Madison, WI, J. P. Kanne, MD, L. S. Broderick, MD, E. A. Kazerooni, MD, C. A. Meyer, MD

### CH154-ED-X

**Beyond the Granuloma: Imaging Manifestations of Thoracic Histoplasmosis**

D. Alvarez, MD, Santiago CHILE, T. J. Bang, MD, C. S. Restrepo, MD, D. Ocacionez, MD, F. Leiter, MD, D. Vargas, MD



#### CH289-ED-X Congenital Malformations of the Pulmonary Vessels in Adults

M. Serra Salas, MD, Barcelona SPAIN, E. Castaner, MD, X. Gallardo, MD, M. Andreu, MD, J. M. Mata, MD, PhD, C. C. Rodriguez, MD

#### ER003-EB-X Pitfalls in Pediatric Musculoskeletal Imaging: Normal Variants Causing Problems for the Radiologist in the Pediatric Emergency Department

M. Hermann, MD, Ann Arbor, MI, J. R. Leschied, MD, S. T. Chong, MD, P. J. Strouse, MD

#### ER101-ED-SUA5 Dual Energy CT for Abdominal and Pelvic Trauma: A Pictorial Review

J. R. Wortman, MD, Boston, MA, J. W. Uyeda, MD, U. P. Fulwadhva, MD, A. D. Sodickson, MD, PhD

#### ER104-ED-X Orbital Hemorrhage: Can You Localize the Blood?

J. Amuta, MD, M. H. Scheinfeld, MD, PhD, Bronx, NY

#### ER112-ED-SUB5 Imaging of the Perineum in the Emergency Setting: A Pictorial Review

J. Choe, MD, Boston, MA, J. R. Wortman, MD, A. D. Sodickson, MD, PhD, B. Khurana, MD, J. W. Uyeda, MD

#### ER124-ED-X Beyond Appendicitis: Ultrasound Findings of Acute Bowel Pathology

J. Choe, MD, Boston, MA, J. R. Wortman, MD, A. Michaels, MD, A. Sarma, MD, U. P. Fulwadhva, MD, A. D. Sodickson, MD, PhD

#### ER129-ED-X Ultrasound of Right Upper Quadrant Abdominal Pain: The Gallbladder is Not Always to Blame!

G. Joshi, MD, K. A. Crawford, MD, Chattanooga, TN, T. N. Hanna, MD, K. D. Herr, MD, K. A. Robinson, MD, N. Dahiya, MD

#### ER131-ED-X Detection and Management of FISHBONE Ingestion

S. TAKEHARA, Okinawa JAPAN, M. Okada, MD, M. Tsubakimoto, MD, T. Yamashiro, MD, Y. Iraha, S. Murayama, MD, PhD

#### ER132-ED-X First Trimester Emergencies: What the Radiologist Needs to Know and What the Clinician Wants to Know

C. Phillips, MD, Boston, MA, J. R. Wortman, MD, E. Ginsburg, MD, A. D. Sodickson, MD, PhD, B. Khurana, MD

#### ER143-ED-X A Tale of Two Ovaries: Cross-Sectional Imaging Spectrum of Ovarian Emergencies

A. J. Baxi, MBBS, DMRD, San Antonio, TX, A. M. Nagar, MBBS, D. Rajderkar, MD, V. Ojili, MD

#### ER164-ED-X Imaging of Acetabular Fractures: From Wreck to Rehab

N. M. Beckmann, MD, Houston, TX

#### ER166-ED-MOAG MDCT of Midfacial Fractures: Classification Systems, Principles of Reduction, and Common Complications

D. Dreizin, MD, Baltimore, MD, S. Diaconu, U. Bodanapally, MD, A. Nam, MD, MS, M. N. Pallas, MD, FRCPC, F. Munera, MD

#### ER168-ED-X Reporting More Than Just Emergent Findings – Role of Detailed Abdominal and Pelvic Imaging in Oncologic Emergencies

A. O. Levey, MD, Atlanta, GA, P. A. Harri, MD, P. K. Mittal, MD, L. F. Alexander, MD, C. A. Coursey Moreno, MD, F. H. Miller, MD

#### ER173-ED-X Thinking Outside the Myocardium: Imaging Review of Non-cardiac, Non-traumatic Causes of Acute Chest Pain

J. Tsuchiya, MD, Tokyo JAPAN, Y. Kurihara, MD, R. Miyazawa, MD, M. Matsusako, MD, PhD, J. Starkey, MD

#### ER176-ED-X Gynecological Emergencies: Pictorial Review

C. A. Silva, MD, Senhora da Hora PORTUGAL, I. Sarmiento, J. C. Pinto

#### GI002-EB-X Inside Out: Ductal Morphology in Characterization of Pancreatic Pathology

A. Pirasteh, MD, Dallas, TX, G. Khatri, MD, A. Diaz de Leon, MD, N. Kubiliun, MD, I. Pedrosa, MD

#### GI015-EB-X X-Ray Defecography “The Forgotten Buddy”

D. A. Rodriguez Quintero Sr, MD, Mexico City D. F. MEXICO, M. Arizaga Ramirez, MD, J. Viridiana Galicia, MD, J. A. Saavedra-Abril, MD

#### GI100-ED-X What Radiologist should Note about Molecular Targeting Therapy: Special Focus on Sorafenib Administration for Advanced HCC

K. Okumura, Kanazawa JAPAN, C. Ueshima, MD, K. Kozaka, MD, T. Minami, MD, D. Inoue, S. Kobayashi, MD

#### GI101-ED-X Oops I Drained it Again

R. D. Clayton, MD, L. Moonjian, MD, Richmond, VA, L. R. Carucci, MD

#### GI102-ED-SUB7 Liver Iron Quantification with MRI: A Primer for Radiologists

R. Labranche, MD, Montreal CANADA, K. Vu, MD, D. Soulieres, MD, MSc, G. Gilbert, PhD, L. Petitclerc, MSc, J. S. Billiard, MD

#### GI110-ED-X LI-RADS v2014 - Illustration of Imaging Features Favoring Malignancy Other than HCC (LR-M)

I. Nikolovski, MBBS, New York, NY, N. M. Long, MD, T. A. Morgan, MD, R. M. Marks, MD, R. Do, MD, PhD

#### GI122-ED-X Small Bowel, Big Problems — Acute Entities of the Small Bowel

M. D. Sugi, MD, Phoenix, AZ, D. S. Katz, MD, M. H. Kwon, M. G. Lubner, MD, V. M. Mellnick, MD, S. Bhalla, MD

#### GI128-ED-X Mind the Gap: Pre and Post Operative Abdominal Wall Hernia Imaging - Are You Doing Justice?

A. R. Patil, MD, FRCR, Bangalore INDIA, H. S. Mohanty, MBBS, S. Nandikoor, MBBS, G. J. Mallarajapatna, MBBS, MD, R. Bhat

#### GI132-ED-X Synoptic Reporting for MRI of Perianal Fistulas

S. Thippavong, MD, Toronto CANADA, A. F. Costa, MD, FRCPC, B. Sreeharsha, FRCPC

#### GI144-ED-X Cross Sectional Imaging of Intrahepatic Cholangiocarcinoma: Development, Growth, Spread, and Prognosis

N. Seo, MD, Seoul KOREA, REPUBLIC OF, J. Choi, Y. Chung, MD, PhD, M. Park, MD, M. Kim, MD, PhD, K. Kim, MD

#### GI145-ED-X Bariatric Surgery: Normal Findings and Complications

C. GALVEZ GARCIA, PhD, SEVILLE SPAIN, A. Talegon Melendez, R. F. Ocete, MD, B. Vargas Serrano, J. Castell, MD, C. Gutierrez

#### GI151-ED-X Liver Imaging Reporting and Data System: An Interactive Tutorial

V. Chernyak, MD, Bronx, NY, C. S. Santillan, MD, J. C. Hooker, BS, C. B. Sirlin, MD

#### GI155-ED-X US of the Bowel in Inflammatory Bowel Disease: The Recent Contributions of Contrast Enhanced Ultrasound (CEUS) and Shear Wave Elastography (SWE)

C. Merrill, C. Lu, MD, A. Medellin-Kowalewski, MD, K. Novak, MD, S. R. Wilson, MD, Calgary CANADA

#### GI157-ED-X A New Era in the Pancreas: Functional Imaging

S. Baleato Gonzalez, MD, PhD, Santiago Spain, R. Garcia Figueiras, MD, PhD, M. Bali, MD, PhD, G. C. Fernandez-Perez, PhD, MD, J. Vilanova, MD, PhD, A. Luna, MD

#### GI158-ED-X Uncommon Localized Cystic Lesions of Liver: Clue to Diagnosis

J. Choe, MD, Seoul Korea, Republic of, K. Kim, Y. Shin, E. Yu, MD, J. Kim, S. Lee, MD

#### GI162-ED-X Radiologic Evaluation in Acute and Chronic Complications of Percutaneous Feeding Tubes

C. Nhan, MD, Montreal CANADA, N. M. Jaffer, MD, R. Beecroft, MD, S. Thippavong, MD, L. S. Guimaraes, MD

#### GI165-ED-WEB8 Evaluation of Abdominal and Pelvic Manifestations of Graft versus Host Disease (GvHD) after Hematopoietic Stem Cell Transplantation

K. Alhalabi, Scottsdale, AZ, C. O. Menias, MD, M. G. Lubner, MD, V. S. Katabathina, MD, K. M. Elsayes, MD, A. K. Hara, MD

#### GI167-ED-X Imaging of Peritoneal Carcinomatosis: Review the Common and Critical Findings to Improve the Radiological Report

S. O. Bernal, MD, D. D. Melquiades, N. Sabaneeff, MD, R. M. Cobo, MD, L. K. Bittencourt, MD, PhD, Rio De Janeiro BRAZIL, R. Blasbalg, MD

#### GI181-ED-X How to Interpret Post-Radioembolization Findings in the Liver on CT and MRI: Everything You Need to Know in 10 Cases

M. P. Bligh, MD, BEng, Halifax CANADA, J. A. King, MD, R. F. Berry, MD, S. C. Burrell, MD, J. A. Rowe, MD

#### GI184-ED-X Beyond Diverticulitis: Complications and Pitfalls Related to Colonic Diverticular Disease

B. W. Welsh, MD, M. G. Lubner, MD, C. O. Menias, MD, V. M. Mellnick, MD, P. J. Pickhardt, MD, Madison, WI

#### GI193-ED-X Pancreatic Ductal Adenocarcinoma with CT Spectral Imaging: What's New?

X. Lin, MD, Shanghai China, H. Xie

#### GI197-ED-X Calcified Liver Masses; Pattern Recognition Approach on Computed Tomography with Pathologic Correlation

M. I. Elshikh, MBCh, C. O. Menias, MD, N. Garg, MD, A. M. Shaaban, MBCh, S. Javadi, MD, A. H. Gaballah, MD, FRCR

#### GI203-ED-X CT of Small Bowel Obstruction: An Update

E. J. Herin, MD, Creteil FRANCE, I. Millet, MD, W. Khaled, L. Corno, MD, I. Boulay-Coletta, MD, S. Silvera, MD

#### GI204-ED-X Uncommon Evolution and Complications of Common Benign Liver Lesions

F. Vernuccio, MD, Palermo ITALY, M. Ronot, MD, M. Dioguardi Burgio, MD, W. Allaham, MD, G. Brancatelli, MD, V. Vilgrain, MD

#### GI217-ED-X It's My Belly Button: Cross-sectional Imaging Spectrum of Diseases of the Umbilicus and Remnants of the Umbilical Cord Revisited

R. J. Jackson, MD, San Antonio, TX, C. S. Restrepo, MD, C. O. Menias, MD, V. S. Katabathina, MD

#### GI223-ED-X The Abnormal Stomach—Gastric Twists and Turns

S. Krishna, MD, Ottawa CANADA, S. Narayanasamy, MBBS, MD, R. Verma, MD, A. Z. Kielar, MD, A. M. Sheikh, MD

#### GI229-ED-X Avoiding Pitfalls in the Interpretation of Gadolinic Acid-enhanced MR Imaging

M. Dioguardi Burgio, MD, Paris France, L. Paulatto, M. Ronot, MD, S. Terraz, MD, V. Vilgrain, MD, G. Brancatelli, MD

#### GI233-ED-X Imaging the J-pouch (Ileal Pouch-Anal Anastomosis or IPAA): Surgical Variations, Natural History and Common Complications

J. D. Reber, MD, Rochester, MN, A. L. Lightner, S. P. Sheedy, MD, D. Bruining, MD, S. W. Trenkner, MD, J. M. Barlow, MD

#### GI254-ED-X Utility of Spectral Analysis of Hepatic Ultrasound in Detecting Cardiac Pathology

H. Rodriguez Requena, MD, San Sebastian De Los Reyes SPAIN, M. Ibanez Moya, I. Salmeron Beliz, MD, I. Cogollos Agruna, MD

#### GI259-ED-X Early Detection of Intrahepatic Cholangiocarcinoma

M. Hamaoka, Kanazawa JAPAN, K. Kozaka, MD, T. Matsubara, N. Yoneda, K. Yoshida, MD, D. Inoue

#### GI266-ED-X DWI of Focal Splenic Lesions

A. Luna, MD, Jaen SPAIN, L. Luna, PhD, L. Alcalá, MD, J. Broncano, MD, R. Garcia Figueiras, MD, PhD, C. O. Menias, MD

#### GI269-ED-MOB10 Imaging Appearance and Surgical Management of Anovaginal and Rectovaginal Fistulas

W. M. VanBuren, MD, Rochester, MN, S. P. Sheedy, MD, A. L. Lightner, S. T. Kim, M. Miller, J. G. Fletcher, MD

#### GI270-ED-X Secondary Sclerosing Cholangitis: Uncommon Causes for a Familiar Disease

A. S. Elnayal, MD, Montreal CANADA, M. Tsatoumas, MD, M. Al Subhi, MD, R. B. Gujrathi, MD, I. Al Basha, C. Reinhold, MD, MSc

#### GI271-ED-X The Gamut of Cystic Liver Lesions: A Pictorial Review

E. E. Saddleton, MD, Chicago, IL, P. Nikolaidis, MD, H. Gabriel, MD

#### GI285-ED-X Perfusional Disorders of the Liver: What Every Radiologist Should Know

F. V. E Silva Filho, MD, Sao Paulo BRAZIL, R. F. Pereira, MD, A. C. Souza, D. d. Romao, MD, P. Panizza, N. d. Horvat, MD

#### GI286-ED-THA7 Collateral Damage: Unintended Consequences of Oncologic Therapy in the Chest, Abdomen, and Pelvis

J. C. Bulman, MD, G. Khatri, MD, Dallas, TX, L. M. Watumull, MD, Y. Arriaga, J. R. Leyendecker, MD

#### GI287-ED-X Primary Sclerosing Cholangitis: What You Should Know

J. C. Spina Jr, MD, Capital Federal ARGENTINA, A. Villamil, E. Mullen, M. De Santibanez, J. L. Savluk, MD

#### GI295-ED-X Cholangiocarcinoma Diagnosis and Staging: Update for Practicing Radiologist

N. Rohani, MD, Darby, PA, O. Teytelboym, MD

#### GI298-ED-THB8 Hepatic Lesions that Mimic Metastasis on Radiological Imaging during Chemotherapy for Gastrointestinal Malignancy: Recent Updates

Y. Han, Seoul KOREA, REPUBLIC OF, B. Park, MD, M. Kim, MD, D. Sung, MD, N. Han, K. Sim

#### GI300-ED-THA8 HIV below the Belt: Infections, Tumors and Everything in Between

C. Patel, MD, Los Angeles, CA, C. M. Jude, MD, M. K. Patel, MD, J. Tang, M. J. Nguyen, MD, A. Pahwa, MD

#### GI307-ED-X Studding, Seeding and Caking: Peritoneal Carcinomatosis on MRI

M. S. Mathew, MD, Chicago, IL, A. J. Alexander, MD, E. Chang, MD, A. Oto, MD

#### GI320-ED-X Small Bowel Crohn's Disease: Its Many Faces

C. A. Silva, MD, Senhora da Hora PORTUGAL, D. D. Maglente, MD

#### GI324-ED-X Portal Biliopathy: A Multitechnique Imaging Approach

M. Fernandes, Rio de Janeiro BRAZIL, A. Eiras-Araujo, MD, D. B. Parente, MD, J. A. Oliveira Neto, MD, H. C. Fortes, MD, B. C. Barbosa, MD

#### GI338-ED-X Diagnostic Approach of Enteropathies: What the Gastroenterologist Needs to Know

P. Panizza, Sao Paulo Brazil, F. L. Costa, MD, D. F. Vieira Vendramini, N. S. Queiroz, MD, N. d. Horvat, MD, M. A. Queiroz, MD

#### GI341-ED-X Emerging Concepts on Oral Contrast Media for CT

M. Patino, MD, Boston, MA, D. Murcia, MD, A. R. Kambadakone, MD, D. V. Sahani, MD

#### HP007-EB-X Hospital Compare: Why Should We Care?

L. H. Du, DO, MPH, New York, NY, B. Li, MD, N. J. Kagetsu, MD

#### HP104-ED-X Medical Student Bucket List- Must-Sees in the Radiology Department before Graduation

S. B. Thomas, DO, Pittsburgh, PA, M. S. Hartman, MD

**HP107-ED-X**

**Letting the Breeze In and Keeping the Bugs Out: The Science and Practice of Image Based Screening and a Proposal for a New Radiology Subspecialty**

H. Milch, MD, Bronx, NY, S. Agonafar, MD, A. S. Bader, MD, F. S. Mazzariol, MD, A. Shmukler, MD, J. M. Levsky, MD, PhD

**HP114-ED-X**

**Minimizing Errors in Plain Film Reporting: A Novel Teaching Tool for Radiology Residents**

S. P. Power, MBCh, MRCPI, Cork IRELAND, M. F. Ryan, MBCh

**HP116-ED-X**

**Big-data Analytics at Work! Understanding Why Patients No Show— Observations from 8.4 Million Patient Visits during 2000-2015 at a Multicenter Academic Radiology Institution**

J. I. Rosenbaum, MD, Seattle, WA, M. L. Gunn, MBChB, C. Hall, PhD, N. J. Beauchamp JR, MD, P. Bhargava, MD

**HP122-ED-X**

**Standardizing the Radiologist Ongoing Professional Practice Evaluation (OPPE) Process**

J. B. Kruskal, MD, PhD, Boston, MA, B. Siewert, MD

**HP126-ED-MOAG**

**Radiation Safety in the Fluoroscopic Suite: History, Current Devices, Future Developments, and Controversies**

D. Szaflarski, MD, Mineola, NY, E. E. Coronel, MD, F. Khan, A. Ahluwalia, BA, D. Gregorius, MS, J. C. Hoffmann, MD

**HP131-ED-X**

**Dr. Deming's 14 Principles: The Foundations of Quality Improvement in Diagnostic Services**

P. Nagpal, MBBS, Iowa, IA, B. A. Policeni, MD, G. Bathla, MBBS, S. S. Saboo, MD, FRCC, A. R. Khandelwal, MD, G. Sharma

**HP133-ED-MOB6**

**Interpretative Error in Radiology — Etiologies and Potential Solutions**

T. A. Fuchs, MD, Brooklyn, NY, S. A. Waite, MD, J. A. Scott, MD, D. L. Reede, MD

**HP135-ED-X**

**Improving Patient Safety in Radiology: Essential Components for a Successful Root Cause Analysis**

S. Bastawros, DO, Seattle, WA, C. Wu, MD

**HP141-ED-X**

**STARD Checklist: It's Also a Blueprint for Designing and Performing Imaging Trials**

S. I. Lee, MD, PhD, Boston, MA, P. M. Bossuyt, PhD

**HP142-ED-WEA6**

**How to Safely Perform MRI in Patients with Pacemakers/ICDs? — A Primer for Radiologists**

F. U. Kay, MD, V. George, MBBS, P. Rajiah, MD, FRCC, Dallas, TX

**HP146-ED-X**

**Expert Witness in Radiology: Ethical and Medicolegal Considerations**

A. Srinivasa Babu, MD, Darby, PA, A. L. Steinberger, DO, M. L. Brooks, MD, JD

**IN103-ED-X**

**Informatics for Radiologists: What is DICOM?**

B. Mervak, MD, Ann Arbor, MI, B. McKenzie, W. J. Weadock, MD

**IN117-ED-X**

**Deep Learning with Convolutional Neural Networks for Radiologic Image Classification**

P. M. Cheng, MD, MS, Los Angeles, CA

**IN118-ED-X**

**Design and Implementation of a Milestone-based Assessment and Feedback Radiology Resident Dashboard**

A. Durojaiye, F. Gispén, MS, M. Cohen, G. Sevinc, P. G. Nagy, PhD, P. T. Johnson, MD, Baltimore, MD

**IN120-ED-X**

**Quantification of Tumor Viability Using Textures Analysis**

W. Cai, PhD, Boston, MA, B. Somarouthu, MD, A. K. Singh, MD, G. J. Harris, PhD

**MI104-ED-SUB5**

**Evolution in Functional Imaging of Prostate Cancer—Role of PSMA PET/CT: The Pathophysiology, Normal Distribution and Clinical Utility of 68Ga-PSMA PET/CT in Prostate Cancer**

V. Rangarajan, MBBS, Mumbai INDIA, A. Agrawal, MBBS, N. C. Purandare, DMRD, S. A. Shah, N. Sable

**MK103-ED-X**

**Common Mistakes and Practical Tips in Dual X-ray Absorptiometry (DXA): A Case-based Review with Clues to Improve Performance**

J. Azpeitia Arman, MD, Madrid Spain, R. M. Lorente-Ramos, MD, PhD, J. C. Albillos Merino, MD

**MK113-ED-X**

**Dye Don't Lie: Pearls and Pitfalls of Fluoroscopic Foot and Ankle Injections**

B. G. Hansford, MD, Sandy, UT, M. R. Tommack, DO, A. K. McGow, MD, S. E. Stilwell, MD, D. D. Williams, MD, C. M. Yablon, MD

**MK114-ED-MOB8**

**MRI of Chondrosis and Cartilage Repair Surgeries with Arthroscopic Correlation**

M. D. Tran, MD, Los Angeles, CA, G. R. Matcuk Jr, MD, M. R. Skalski, DC, C. T. Vangsness Jr, MD, D. B. Patel, MD, E. A. White, MD

**MK117-ED-X**

**A PCL at the PCL: A Pretty Complete Look at the Posterior Cruciate Ligament**

M. A. Anderson, MD, Boston, MA, F. J. Simeone, MD, C. Y. Chang, MD

**MK118-ED-TUB8**

**The SAPHO Syndrome Revisited with an Emphasis on Spinal Manifestations**

A. Leone, MD, Rome ITALY, V. N. Cassar-Pullicino, MD, C. Colosimo, MD

**MK120-ED-X**

**Articular Accumulation – Musculoskeletal Findings of Deposition Diseases**

J. D. Poot, DO, Hamburg, PA, J. M. Petscavage-Thomas, MD, MPH, E. A. Walker, MD, MHA, C. L. Andrews, MD

**MK123-ED-X**

**An Imaging Review of Muscle, Part 1: Trauma**

C. Mejia Gomez, MD, D. V. Flores, MD, San Diego, CA, M. Fernandez Hernandez, L. Cerezal, MD, M. Estrada Castrillon, MD, E. Smitaman, MD

**MK128-ED-X**

**DIXON Sequence: Technical Adjustments and Clinical Applications Focused on the Musculoskeletal System**

M. Gomez Cabrera, MD, Cadiz SPAIN, T. Martin, MD, A. Luna SR, MD, J. Broncano, MD, P. Caro, F. Caro Mateo

**MK129-ED-X**

**MRI of Meniscal Implant and Allograft Transplantation: What Every Radiologist Should Know**

M. Gomez Cabrera, MD, Cadiz SPAIN, A. Luna SR, MD, T. Martin, MD, P. Caro, E. Heursen, A. Pineda

**MK141-ED-X**

**Ultrasound and MR of the 1st Metatarsophalangeal Joint: Anatomical Correlation, Findings in Volunteers, and Pathological Findings**

M. O. De Maeseneer, MD, PhD, Jette BELGIUM, S. Probyn, S. Marcellis, MD, J. De Mey, A. Milants, M. Shahpour, MD

**MK144-ED-X**

**A Radiologist's Guide to Evaluate Wrist Alignment: The Good, Bad and Ugly**

W. Lin, MD, Redwood City, CA, B. H. Do, MD, M. Nguyen, MD

**MK147-ED-X**

**Pelvic Trauma: What Every Radiologist Should Know**

J. A. Vossen, MD, PhD, Richmond, VA, P. Myrick, MD, P. J. Haar, MD, PhD, K. B. Hoover, MD, PhD, C. W. Hayes, MD

**MK149-ED-X**

**Complications of Arthroscopic Surgery for Femoro-acetabular Impingement (FAI)**

J. R. Crim, MD, Columbia, MO, P. Kumar, MBBS

**MK151-ED-X**

**Imaging and Pathology of the Sternoclavicular Joint**

C. K. Gomez, DO, Rochester, NY, S. R. Schiffman, MD

**MK152-ED-X**

**A Practical Guide to Evaluation of Total Knee Prosthesis: What to Look for in XR, CT and MRI**

C. Armani, Sao Paulo BRAZIL, R. F. Amaral, MD, G. d. Monjardim, MD, A. A. Caland, MD, A. Y. Aihara, MD, F. B. Ferreira, MD

**MK153-ED-X**

**How to Diagnose an Isolated Presacral Mass?**

L. Colleter, MD, Paris FRANCE, E. Sibileau, MD, C. C. Hoefel, MD, S. Ammari, J. Laredo, MD

**MK158-ED-X**

**Food for Thought: Rice Bodies in Musculoskeletal Imaging**

U. Aydingoz, MD, Ankara TURKEY, Z. Maras Ozdemir, MD, H. Ozcan, MD, A. Gunes, MD, F. Ergen

**MK163-ED-X**

**Imaging Evaluation of Peripheral Nerve Tumors and Tumor-like Conditions**

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**MK168-ED-X**

**Patterns of Chondral Lesions in the Setting of Meniscal Pathology: Cadaveric and Clinical Examples Emphasizing Interdependence**

A. Vidoni, MD, San Diego, CA, T. De Coninck, MD, S. Statum, R. Biswas, B. Tran, W. C. Bae, PhD

**MK169-ED-X**

**“Tricks Up The Sleeve”: Intraoperative Ultrasound of Peripheral Nerves**

F. Altahawi, MD, Chicago, IL, K. J. Blount, MD, M. Kliot, T. H. Grant, DO, A. Garg, MD, MBA, I. M. Omar, MD

**MK171-ED-X**

**Understanding MRI of Cartilage Repair—A Focus on Clinical Relevance**

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**MK176-ED-X**

**Beyond the Sacroiliac Joints: Vertebral Involvement of Axial Spondylarthritis and SAPHO**

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**MK178-ED-X**

**A Guided Tour of the Anterior Knee: Challenges Posed by Normal and Variant Anatomy**

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**MK181-ED-WEA8**

**A Review of Athletic Pubalgia: Synthesis at the Pubic Symphysis**

D. Lin, MD, New York, NY, T. T. Wong, MD, J. K. Kazam, MD

**MK186-ED-X**

**Off the Cuff: The Radiologist's Primer to Imaging the Non-Cuff, Non-Labral, Postoperative Native Shoulder**

C. R. Smith, MD, Saint Louis, MO, J. D. Stensby, MD, J. Yoon, J. R. Long, MD, M. V. Friedman, MD, T. J. Hillen, MD

**MK189-ED-X**

**Functional MRI for Extracellular Matrix Evaluation of Hyaline Cartilage: A Different Pathophysiological Approach**

T. Martin, MD, Jaen Spain, M. Gomez Cabrera, MD, A. Luna SR, MD, E. Heursen, P. M. Martinez Hurtado, MD, J. Vilanova, MD, PhD

**MK190-ED-THA8**

**Why do Nerves Bright on DWI and Other FAQ about Functional MR-Neurography for Beginners**

T. Martin, MD, Jaen Spain, A. Luna SR, MD, M. Gomez Cabrera, MD

**MK204-ED-X**

**Imaging of Heel Pain: A Pictorial Review**

E. Barcina-Garcia, MD, Madrid SPAIN, R. M. Lorente-Ramos, MD, PhD, J. Azpeitia Arman, MD, M. Grande, MD, E. Diez-Uriel, MD, E. Roa, MD

**MK211-ED-X**

**Fracture-Dislocations of the Hip Joint: What the Surgeon Wants to Know**

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**MK214-ED-X**

**Blood and Bone: Skeletal Manifestations of Hematologic Disorders**

V. Rubio, I. Rossi, R. Barousse, MD, G. A. Azulay, MD, M. Volpacchio, MD, Buenos Aires ARGENTINA, G. H. Aguilar, MD

**MK235-ED-X**

**Imaging of Juvenile Pre-arthritis Hip Conditions and Their Long Term Evolution**

C. Kraus, MD, New York, NY, R. S. Ayyala, MD, J. K. Kazam, MD, T. T. Wong, MD

**MK236-ED-X**

**Ankle Tendon and Ligament Surgeries: What the Radiologist Needs to Know**

M. T. Rodrigues, MD, Sao Paulo BRAZIL, M. Bordalo-Rodrigues, MD, PhD, P. P. Helito, MD, H. P. Costa, MD, A. D. Teixeira Neto, MD, R. R. Tonan

**MK255-ED-X**

**Approach to the Sonographic Evaluation of Soft Tissue Masses**

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**MK260-ED-X**

**Volumetric Tumor Quantification of Neurofibromatosis in MRI**

W. Cai, PhD, Boston, MA, G. J. Harris, PhD

**MK286-ED-X**

**Magnetic Resonance-guided Focused Ultrasound (MRgFUS) Treatment for Pain Palliation in Bone Metastases**

C. Marrocchio, rome ITALY, S. Dababou, H. Erasmus, R. Scipione, A. Napoli, MD, C. Catalano, MD

**MS102-ED-SUB1**

**Whole-Body MRI in Multiple Myeloma**

F. Mungai, MD, Florence ITALY, C. Dini, S. Chiti, C. Nozzoli, M. Staderini, V. Berti, MD

**MS104-ED-X**

**Heart Diseases Affecting the Liver and Liver Diseases Affecting the Heart: Crossing the Diaphragm Wall**

A. Ghahalla, MD, Geneva SWITZERLAND, S. Franchi-Abella, MD, M. Lagadec, MD, J. Bouchardy, V. Lambert, F. Lador

**MS115-ED-X**

**Low keV/kVp Imaging in the Era of Multi-Energy Spectral CT: A Mirage or a Miracle?**

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**MS124-ED-X**

**Tumors of hematopoiesis: A Simplified Approach**

R. Miyazawa, MD, Tokyo JAPAN, T. Nozaki, MD, S. Horiuchi, MD, M. Matsusako, MD, PhD, J. Tsuchiya, MD, Y. Kurihara, MD

**MS127-ED-THA1**

**Spectrum of PET/CT Findings in Tumors of the Musculoskeletal System: Diagnostic Patterns, Staging, Pearls and Pitfalls**

A. A. Saeed Bamashmos, MBChB, C. M. Muthalgi, MBBS, V. L. Cox, MD, S. Gupta, MD, S. Yedururi, MBBS, N. Garg, MD

**MS130-ED-X**

**Eosinophil-associated Diseases: A Review**

S. Nagata, MD, Kurume JAPAN, H. Nishimura, MD, K. K. Anrami, MD, A. Sumi, MD, A. Kuhara, T. Ebata

**MS140-ED-X**

**Pneumo-anatomy: Anatomical Lessons from Cases of Surgical Emphysema**

T. Das, PhD, FRCC, Cambridge UNIT-KINGDOM, K. Tweed, FRCC, H. C. Addley, MRCP, FRCC, E. M. Godfrey, MBCh, FRCC

**MS146-ED-X**

**Sarcoidosis from Head to Toe: What the Radiologist Needs to Know**

D. M. Ganeshan, MBBS, FRCC, Houston, TX, S. Bhalla, MD, K. Sandrasegaran, MD, P. J. Pickhardt, MD, M. G. Lubner, MD, C. O. Menias, MD

**MS149-ED-MOB2**

**Tumors in Von Hippel Lindau Syndrome from Head to Toe: A Comprehensive State-of-the-Art Review**

D. M. Ganeshan, MBBS, FRCC, Houston, TX, S. Bhalla, MD, K. Sandrasegaran, MD, P. J. Pickhardt, MD, M. G. Lubner, MD, C. O. Menias, MD

**MS150-ED-TUA2**

**Checking In with Checkpoint Inhibition: Imaging Review of PD1 Inhibitor Immune-Related Adverse Events**

M. Quirk, MD, Los Angeles, CA, A. J. Gutierrez, MD, K. Ruchalski, MD, R. D. Suh, MD, D. Wallace, MD, P. Gupta

**MS154-ED-TUB2**

**Multimodality Imaging in Secondary Hypertension: A Comprehensive Review and Pictorial Essay**

H. Ahn, MD, Seongnam-si KOREA, REPUBLIC OF, H. Lee, MD, PhD, S. Hwang, MD, Y. Kim, MD, S. Choi, MD, E. Chun, MD, PhD

**NM004-EB-TUA**

**Lung Scintigraphy in Transplant Patients – A Primer**

D. F. Pinho, MD, Dallas, TX, A. Banga, F. Torres, MD, D. Mathews, MD, PhD

**NM102-ED-MOA11**

**“When Lost in Darkness He who Lights the Way, Marks Himself as Easy Prey”: Lighting the Infection/Inflammation on Hybrid Imaging- Review of Literature**

N. Shekhrjaka, K. A. Modi, MBBS, R. V. Fisker, MD, V. V. Iyer, MD, R. Aleksyniemi, MD, PhD, Aalborg DENMARK

**NM109-ED-X**

**Thyroid Scintigraphy in Congenital Hypothyroidism: What the Radiologist Should Know?**

S. S. Kumbhar, MBBS, MD, Seattle, WA, H. Khalatbari, MD, S. Behnia, MD

**NM110-ED-SUA10**

**Spectrum of PET/CT Findings in Tumors of the Musculoskeletal System: Diagnostic Patterns, Staging, Pearls and Pitfalls**

N. C. Purandare, DMRD, Mumbai INDIA, V. Rangarajan, MBBS, S. A. Shah, A. Agrawal, MBBS

**NM116-ED-X**

**A Pitfall of 11C-methionine PET/CT in the Benign Brain Diseases: What the Radiologist Should Know**

R. Nakajima, MD, PhD, Tokyo JAPAN, Y. Matsuo, MD, K. Abe, MD, M. Momose, MD, PhD, K. Fukushima, S. Sakai, MD

**NM120-ED-X**

**Lung Cancer: A Multimodality Review of the Emerging TNM Staging Criteria**

H. R. Monahan, MD, Rochester, MN, E. L. Martin-Macintosh, MD, S. M. Broski, MD, A. H. Goenka, MD, D. B. White, MD, K. W. Cummings, MD

**NM136-ED-X**



**NR021-EB-MOA**  
Overview of a Synthetic MRI: Basic, Clinical Applications, and Limitations

C. Andica, Tokyo JAPAN, A. Hagiwara, MD, M. Hori, MD, K. K. Kumamaru, MD, PhD, M. Nakazawa, N. Takano

**NR107-ED-X**  
Dual Energy Computed Tomography of the Head

N. Naruto, Toyama JAPAN, K. Noguchi, MD

**NR113-ED-X**  
Tips and Tricks in Oropharyngeal Swallowing Videofluoroscopic Evaluation. A Review of Technique, Normal Findings and Signs of Pathology

J. Aspetitia Arman, MD, Madrid Spain, R. M. Lorente-Ramos, MD, PhD, P. Gete Garcia, T. Collazo Lorduy, N. Santamaria Guinea

**NR118-ED-X**  
Multimodality Imaging Evaluation of Symptomatic Developmental Venous Anomalies

C. Hsu, MBBS, Brisbane AUSTRALIA, G. Kwan, MBBS, T. Watkins, MBBS, T. Krings, MD, PhD

**NR119-ED-X**  
All that Restricts is Not Necessarily Ischemic - Test Your Stroke of Luck!

E. Kuoy, MD, Orange, CA, J. Ton, MD, W. Manzano, BS, R. M. Venkatesh, MD, D. Fiorilli, MD, A. N. Hasso, MD

**NR135-ED-X**  
More Than Just Dull Trauma: The Blunt Truth on the Imaging and Management of BCVI

A. M. Rutman, MD, Seattle, WA, M. Mossa-Basha, MD

**NR136-ED-MOA9**  
White-matter-attenuated Inversion Recovery (WAIR): A New Sequence for Evaluating Various Neurologic Diseases

Y. Tsushima, MD, Maebashi JAPAN, S. Motegi, H. Tomonaga, MD, T. Shimada, N. Hayashi, PhD, H. Nagase

**NR139-ED-X**  
Navigating the Neoplasm Chasm: Tips on How to Distinguish CNS Neoplasms from Non-neoplastic Processes using a Collection of Interesting Cases

J. C. Williams, MD, Rochester, MN, J. M. Morris, MD

**NR144-ED-MOB9**  
Standing Cone Beam CT Myelography of the Spine

N. G. Campeau, MD, Rochester, MN, G. M. Miller, MD, A. C. Patton, MD, K. R. Thielen, MD

**NR155-ED-X**  
"Not Mini-Me" Review of Pediatric Diffuse Gliomas and How They are Different from Adult Gliomas

M. S. Aboian, MD, PhD, San Francisco, CA, D. Solomon, MD, PhD, E. Felton, S. Mueller, MD, PhD, S. Cha, MD

**NR161-ED-X**  
Odontogenic Infections in the Emergency Radiology Setting: Clinical Microbiological and Radiological Correlation

K. I. Hassan, MD, Boston, MA, B. Setty, MD, M. N. Chapman, MD, O. Sakai, MD, PhD

**NR163-ED-X**  
Symmetric Diffusion Abnormalities in Non-Ischemic Neurologic Syndromes: Pattern Based Approach to Diagnosis

S. G. Dua, MD, Chicago, IL, K. G. Sharbidre, MD, V. D. Bachhav, MBBS, M. D. Jhaveri, MD, S. E. Byrd, MD

**NR164-ED-X**  
Idiopathic Intracranial Hypertension: Classical and Unconventional Imaging Signs

S. G. Dua, MD, Chicago, IL, V. D. Bachhav, MBBS, K. G. Sharbidre, MD, M. D. Jhaveri, MD, S. E. Byrd, MD

**NR166-ED-X**  
"Oops! I Thought It was a Foreign Body...": CT and MR Evaluation of Orbital Procedures

K. Ali, MD, Chicago, IL, M. Nagarajan, MD, FRCP, M. D. Jhaveri, MD, S. H. Bhabad, MD, FRCP, R. M. Sheth, C. Singh, MD

**NR173-ED-X**  
Stalking the Pituitary Gland! A Comprehensive Imaging Review of Pituitary Infundibulum and Posterior Pituitary Lesions

K. C. Buchanan, MD, New Haven, CT, R. A. Bronen, MD, A. Mahajan

**NR183-ED-X**  
Bright Lesions on Diffusion-weighted MR Images: From the Recognition of Lesions to a Specific Diagnosis

A. Kunitatsu, MD, Tokyo JAPAN, N. Kunitatsu, MD, K. Kamiya, MD, M. Katsura, MD, PhD, H. Mori, MD

**NR193-ED-X**  
MRI of Toxic, Metabolic and Autoimmune Encephalopathies: What the Radiologist Needs to Know—A Pictorial Review

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**NR195-ED-X**  
Cysts of Head & Neck Made Easy: An Anatomico Radiological Review

A. R. Patil, MD, FRCP, Bangalore INDIA, S. Nandikoor, MBBS, S. Shivakumar

**NR200-ED-X**  
Truths and Lies about DTI for Spinal Cord Evaluation: It Is Really Better than Conventional DWI?

T. Martin, MD, Jaen Spain, A. Luna SR, MD, J. P. Martinez Barbero, MD, PhD

**NR214-ED-X**  
Rapid kVp Switching Dual-energy CT Angiography for Evaluating Carotid Artery Stenosis

Y. Shinohara, Yonago JAPAN, K. Kiyu, MD, J. Kishimoto, M. Sakamoto, S. Fujii, MD, T. Ogawa, MD

**NR224-ED-X**  
What is Your Diagnosis? Common and Uncommon Extraocular Lesions of the Orbit

J. B. Mueller, MD, Iowa City, IA, L. R. Gentry, MD, D. L. Reede, MD, W. R. Smoker, MD

**NR226-ED-X**  
Non-traumatic Conditions of Inner Ear, Internal Auditory Canal, Jugular Foramen and Petrous Apex: CT as First Diagnostic Approach and MRI Contribution

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**NR236-ED-X**  
Mutiparametric MR Imaging and Implication of Relevant Clinical Information Play a Major Role in the Pre and Post-treatment Evaluation of Medulloblastomas

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**NR250-ED-X**  
Uncommon but Not Forgotten: Non-squamous Cell Tumors of the Larynx

J. S. Magalhaes, BMedSc, Sao Paulo BRAZIL, V. C. Zanetta, MD, D. M. Fernandes, MD, M. Sarpi, MD, R. L. Gomes, PhD, MD, E. M. Gebrim, MD

**NR262-ED-X**  
Exploring the Implications of HPV and HIV for Head and Neck Cancers and Diagnostic Imaging Challenges

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**NR265-ED-X**  
Multimodality Imaging of Parathyroid Disease using Parathyroid 4D CT and Sestamibi SPECT/CT: What the Radiologist Needs to Know

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**NR266-ED-X**  
Navigating the Visual Pathway: An Illustrative Case Based Roadmap of Visual Loss

J. A. Coburn, MD, B. Y. Chan, MD, Madison, WI, G. D. Avey, MD, J. J. Yu, MD, PhD, Y. Chen, MD, PhD, T. A. Kennedy, MD

**NR272-ED-X**  
Facial Aesthetic Procedures: How to Recognize and Assess Complications

R. F. Pereira, MD, Sao Paulo BRAZIL, S. R. Rocha, MD, L. F. Godoy, MD, L. N. Silva, MD, C. D. Leite, MD, PhD, E. M. Gebrim, MD

**NR274-ED-SUA8**  
Broken Bridges - DTI Characterization in Posterior Fossa Malformations

L. Fajardo, MD, Sao Paulo BRAZIL, S. F. Ferracioli, MD, A. R. Coutinho, C. M. Rinkus, MD, M. Martin, MD, PhD, L. T. Lucato, MD

**NR275-ED-X**  
Incomplete Cord Syndromes: Clinical and Imaging Review

V. Kunam, MD, Brooklyn, NY, D. L. Reede, MD, W. R. Smoker, MD, V. Velayudhan, DO, S. Pulitzer, MD, M. Bobinski, MD, PhD

**NR279-ED-X**  
What Is This Clicking in My Jaw? MRI of Temporomandibular Joint Dysfunction

S. R. Rocha, MD, Sao Paulo BRAZIL, D. d. Romao, MD, C. D. Leite, MD, PhD, L. N. Silva, MD, R. F. Pereira, MD, E. M. Gebrim, MD

**NR294-ED-X**  
External Auditory Canal: The Neuroradiology Outsider

R. Eldaya, MD, Galveston, TX, S. Herrmann, MD, M. Ditzler, MD, K. M. Raj, MD

**NR297-ED-X**  
Correlation of Ultrasound Findings with the Bethesda Cytopathology Classification for Thyroid Nodule: How Can It Improve My Routine?

O. C. Saito, MD, PhD, Sao Paulo BRAZIL, M. Chammas, MD, M. M. Hanaoka, MD, S. M. Tochetto, MD, w. y. kawakami, MD, G. G. Cerri, MD, PhD

**NR307-ED-X**  
Time is Brain... and Collaterals! H. C. Alves, MD, Sao Paulo BRAZIL, F. T. Pacheco, MD, R. Hoffmann Nunes, MD, A. C. Maia Jr, A. J. da Rocha, MD, PhD

**NR320-ED-X**  
Hyperammonemic or Non-hyperammonemic Hepatic Encephalopathy: Pathology and Pathophysiology and Imaging Findings with Emphasis on Diffusion-weighted Imaging

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**NR322-ED-X**  
Underdeveloped Brain and Microcephaly: Embriology, Genetic and Imaging Approach

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**NR325-ED-X**  
Untangling the Brachial Plexus: Dynamic Imaging in the Normal and Pathologic State

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**NR334-ED-MOB10**  
Arterial Spin Labeling Based MR Perfusion in Symptomatic Epilepsy: Delineating the Epileptogenic Zone

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**NR337-ED-X**  
Lessons Learnt in Clinical Applications of Spinal Cord DTI and Fibre Tracking in Clinical Practice: What Every Resident Must Know

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**NR339-ED-X**  
3D Rotational Angiography in the Demonstration of Dural Vasculature

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**OB111-ED-X**  
Intrauterine Linear Echogenicities in the Gravid Uterus: What Radiologists Should Know

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**OB118-ED-X**  
Imaging the Endometrium: Physiologic Changes and Pathologic Diseases

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**OB120-ED-THA1**  
Saline Infused Sonohysterography—Technique and Spectrum of Disease

B. Pooler, MD, L. Gettle, MD, J. B. Robbins, MD, V. K. Wong, Houston, TX

**OB124-ED-X**  
Survey of Atypical Solid Ovarian Masses with Clinical-Radiologic-Pathologic Correlation

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**OB125-ED-THB1**  
Transvaginal Ultrasound (TV US) Guided Procedures: A Review

M. A. Rashid, MD, Los Angeles, CA, H. A. Tchelepi, MD, D. K. Walker, MD

**OB126-ED-X**  
Gastroschisis: What the Radiologist Needs to Know

P. Entezari, MD, Portland, OR, A. M. Basta, MD, K. Y. Oh, MD, N. Jafarian, MD, R. Sohaey, MD

**OB136-ED-X**  
Blast from the Past: Hysterosalpingogram (HSG): Indications, Technique, Imaging Findings and Pitfalls

M. Rezvani, MD, Salt Lake City, UT, A. M. Kennedy, MD, P. J. Woodward, MD, J. D. Olpin, MD, K. M. Elsayes, MD, A. M. Shaaban, MBBS, MD

**OB137-ED-X**  
First Trimester Pregnancy Complications: What the On-Call Radiologist Needs to Know

C. A. Woodfield, MD, Newtown, CA, P. S. Lim, MD

**OB141-ED-X**  
Subfertility—What the Radiologist Needs to Know

S. Vickramarajah, MBBS, BSc, London UNITED KINGDOM, V. Stewart, K. van Ree, MBBS, FRCP, A. P. Hemingway, MBBS, FRCP, M. Crofton, FRCP, S. S. Moser

**OB152-ED-X**  
Multimodality Imaging in Secondary Postpartum Hemorrhage: Retained Products of Conception and Related Conditions

Y. Iraha, Nishihara-cho Japan, M. Okada, MD, K. Azama, M. Toguchi, MD, R. Iraha, S. Murayama, MD, PhD

**OB154-ED-X**  
Hysterosalpingography in the Diagnosis of Asherman's Syndrome: Illustration of the Range of Appearances of Scar Tissue/Synechiae and the Importance of HSG Technique and Accurate Localisation of Synechiae for Successful Patient Management

A. P. Hemingway, MBBS, FRCP, London UNITED KINGDOM, G. Trew, MBBS, T. Seaton, MBBS, FRCP, S. A. Sudderruddin, MRCP, FRCP, R. D. Williamson, MBBS, S. S. Moser

**OB164-ED-X**  
Imaging Appearance and Management of Borderline Ovarian Tumors

W. M. VanBuren, MD, Rochester, MN, R. Brown, MD, K. M. Dudiak, MD, C. O. Menias, MD, K. M. Elsayes, MD, A. M. Shaaban, MBBS, MD

**OB165-ED-X**  
Lessons from the Gynaecology Oncology Tumor Board

S. Vickramarajah, MBBS, BSc, London UNITED KINGDOM, E. Daulton, MBBS, T. D. Barwick, MBChB, N. Bharwani, MBBS, FRCP, V. Stewart

**OB178-ED-X**  
Atypical Locations Endometriosis: Rare Manifestations of a Common Disease

F. Leiter, MD, Santiago CHILE, D. Alvarez, MD, J. Gutierrez Chacoff, MD, P. Sepulveda Pinto, MD, C. Varela, MD

**OB179-ED-X**  
Ultrasound Assessment of Mimics of Pelvic Inflammatory Disease

A. Chang, MD, San Diego, CA, J. D. Kirsch, MD, M. Spektor, MD, L. M. Scoutt, MD, R. J. Hooley, MD, M. V. Revzin, MD

**PD100-ED-X**  
Pediatric Gallbladder in Health and Disease

C. Marin, MD, PhD, Madrid SPAIN, C. Gallego, MD, M. Fanjul, MD, A. Lancharro, MD, A. Aguado, MD, Y. Ruiz Martin Sr, MD

**PD101-ED-SUA6**  
Primovist/Eovist in Pediatrics: When and How?

A. W. Elmanzalawy, FRCP, Calgary CANADA, X. Wei, MD, FRCP, S. Haider, MD, S. K. Bhandal, MBBS, MD, I. H. al-Shuaili, MD, C. L. Ortiz, MD

**PD104-ED-X**  
Skeletal Disorders Caused by Fibroblast Growth Factor Receptor (FGFR) Gene Mutations

K. M. Sargar, MBBS, MD, Saint Louis, MO, A. K. Singh, MD, S. C. Kao, MD



## PD106-ED-SUB6

## Appendicitis and Beyond: A Case-based Review of Gastrointestinal Pathology in Pediatric Patients Undergoing Ultrasound Evaluation of Acute Abdominal Pain

H. Allen, MD, Madison, WI, B. Y. Chan, MD, E. Riedesel, MD, K. Gill, MD

## PD107-ED-MOAG

## Multimodality Imaging of Pediatric Non-malignant Adrenal Lesions

K. M. Sargar, MBBS, MD, Saint Louis, MO, J. Qi, MD, R. L. Hulett, MD, G. Khanna, MD, MS

## PD108-ED-X

## Sonography of Superficial Lumps and Bumps of the Pediatric Head and Neck: What You Need to Know

A. G. Bansal, MD, New York, NY, H. Kothus Rosenberg, MD

## PD110-ED-X

## Not Just Nodes! Imaging Review of the Pulmonary Manifestations of Pediatric Lymphoma and Lymphoma-like Disorders

T. I. Liang, MD, Vancouver CANADA, H. R. Nadel, MD, H. J. Bray, MD

## PD113-ED-X

## Imaging of Physical and Peri-Physical Disturbances

J. C. Nguyen, MD, Madison, WI, K. Gill, MD, A. C. Mellow JR, MD, B. K. Markhardt, MD, T. Y. Tao, MD, PhD, K. W. Davis, MD

## PD116-ED-X

## Challenging Pediatric Bone Marrow Findings: A Self-Assessment Exercise

T. Chapman, MD, MA, Seattle, WA, N. Valeur, MD, J. P. Otjen, MD

## PD123-ED-X

## Acute Hip Pain in Children: What Technique and What to Look For?

E. Inarejos Clemente, MD, Barcelona SPAIN, M. Navallas, MD

## PD130-ED-X

## Beyond Birth Hypoxia: A Clinical and Imaging Review of Other "Accidents of Birth"

U. Cain, MD, S. P. Meyers, MD, PhD, A. Chaturvedi, MD, J. G. Blickman, MD, PhD, A. Chaturvedi, MD, Rochester, NY

## PD134-ED-THA7

## Utility of Contrast Enhanced Ultrasound for Assessment of Pediatric Focal Liver Lesions

S. A. Anupindi, MD, Philadelphia, PA, S. J. Back, MD, A. Ntoulia, MD, PhD, L. Poznick, BA, T. Morgan, BA, D. M. Biko, MD

## PD156-ED-MOB7

## Congenital Adrenal Hyperplasia: Fetal and Pediatric Imaging Findings and Management

P. Vajtai, MD, Portland, OR, K. Jensen, MD, C. Pyle, MD, R. Sohaey, MD, K. Y. Oh, MD

## PD171-ED-WEB6

## Imaging Patterns of Liver Lesions in Children with Emphasis on Ultrasound

T. R. Yamanari, MD, Sao Paulo BRAZIL, N. d. Horvat, MD, A. S. Marcelino, MD, S. Rangel Santos, P. C. Viana, MD, P. Chapchap, MD

## PD173-ED-X

## When the Pediatric Dermatologist Calls: A Collaborative Guide to Dermatologic Diagnoses that Require Imaging

S. T. Allen, MD, Bethesda, MD, H. J. Otero, MD, A. Y. Kirkorian, M. Whitehead, MD

## PD179-ED-X

## Imaging Findings in Typical and Atypical Central Nervous Infections during Fetal Development and Childhood

A. Bhatia, MD, MS, Nashville, TN, H. J. Otero, MD, G. Colafati, J. Loomis, MD, C. Carducci, MD, A. K. Parikh, MD

## PH002-EB-X

## Universal Calibration Curve for a Small-type OSL Dosimeter to be Used for Direct Dose Measurements of Direct, Scattered and Penetrating X-rays in the Diagnostic Region

K. Takegami, Tokushima Japan, H. Hayashi, PhD, N. Kimoto, Y. Mihara, Y. Kanazawa, PhD, K. Higashino



## PH101-ED-SUA7

## Accelerated MR Imaging, Its Benefits in Daily Routine, Current Limitations and Future Developments

J. K. Richter, MD, Bern SWITZERLAND, V. M. Runge, MD, R. D. Merges, M. Klarhofer, J. T. Heverhagen, MD, PhD

## PH106-ED-X

## Need for Speed: A Beginner's Guide of Compressed Sensing for Radiologists

T. Yamamoto, MD, Kyoto JAPAN, T. Okada, MD, PhD, K. Fujimoto, MD, PhD, Y. Fushimi, MD, PhD, A. Yamamoto, MD, PhD, S. Kanao, MD

## PH107-ED-X

## Can Size-Specific Dose Estimates (SSDE) be Regarded as the Preferred Dose Index for the Detectability in Lung Cancer CT Screening?

Y. Muramatsu, PhD, Kashiwa JAPAN, K. Nomura, MS, K. Fujii, M. F. McNitt-Gray, PhD, M. Kusumoto, MD

## PH111-ED-X

## Current and Novel Techniques for Metal Artifact Reduction in Computed Tomography: A Practical Guide for Clinicians

M. Katsura, MD, PhD, Tokyo JAPAN, K. Ino, PhD, J. Sato, MD, M. Akahane, MD, A. Kunimatsu, MD, O. Abe, MD, PhD

## PH124-ED-X

## Physical Principles of Photon-counting CT

J. R. Taylor, MD, Bethesda, MD, R. Symons, MD, S. Kappler, Dipl Phys, M. K. Fuld, PhD, T. E. Cork, BS, M. N. Lakshmanan, PhD

## RO106-ED-X

## Pathology and Images of Radiation Induced Hepatitis

S. Takamatsu, MD, PhD, Kanazawa city JAPAN, K. Kozaka, MD, S. Kobayashi, MD, N. Yoneda, K. Yoshida, MD, D. Inoue

## RO107-ED-SUA5

## Radiology Collaboration—ECG Gated CT and Radiation Therapy: Saving Coronary Arteries One Heart Beat at a Time

N. Weber, Rochester, MN, S. Leng, PhD, E. E. Williamson, MD, E. Sheedy, C. Walfoort, K. Halda

## UR101-ED-X

## Follow the Stream: Imaging of Augments, Reconstructions and Non-Cystectomy Urinary Diversions in Adult Patients

L. Moomjian, MD, Richmond, VA, L. R. Carucci, MD, G. Guruli, MD, A. Klausner

## UR111-ED-X

## Not Always Cancer: Multiparametric MR Imaging on the Differential Diagnoses of Elevated PSA Levels

H. E. Pinto, MD, Rio de Janeiro BRAZIL, R. Varela, MD, A. S. Purysko, MD, G. H. Andrade, D. G. Neves, MD, L. K. Bittencourt, MD, PhD

## UR117-ED-X

## 4,3,2,1... How Many Phases are Needed? Balancing Diagnostic Efficacy and Radiation Modulation for MDCT Imaging of Renal Cell Carcinoma

J. M. Hackworth, MD, MS, S. P. Rowe, MD, PhD, S. Kawamoto, MD, E. K. Fishman, MD, P. T. Johnson, MD, Baltimore, MD

## UR120-ED-X

## A Troubled Stream: Fluoroscopic Evaluation of the Adult Male Urethra

J. Flanagan, Dallas, TX, S. M. Norddeck, MS, RRA, R. C. Batz Jr, MD, C. Brevington, MD

## UR124-ED-X

## Transition Zone Prostate Cancer: Pearls, Pitfalls and Dilemmas in the Diagnosis and Interpretation on Prostate MRI

V. Tammisetti, MD, Houston, TX, R. P. Castillo, MD

## UR126-ED-X

## Advanced DWI Analysis for Kidney Evaluation Using IVIM and Kurtosis: Physical Basis and Clinical Applications

T. Martin, MD, Jaen Spain, A. Luna SR, MD, J. Broncano, MD, L. Alcalá Mata, MD, I. Valero, BMedSc

## UR130-ED-X

## Percutaneous and Laparoscopic Renal Cryoablation Imaging Follow-up: Comparison between MR and CT Imaging Patterns

G. Cardone, MD, Milano ITALY, M. Papa, MD, P. Mangili, PhD, G. Balconi

## UR135-ED-TUB7

## Uncommon Malignant Renal Tumors and Atypical Presentation of Common Ones: A Guide to Radiologists

C. T. Guimarães, MD, San Francisco, CA, Z. J. Wang, MD, R. J. Zagoria, MD, J. P. Simko, MD, PhD, K. Lopez, A. C. Westphalen, MD

## UR142-ED-WEA7

## Adrenal Cortical Hyperplasia: Diagnostic Workup, Subtypes, Imaging Features and Mimics

M. M. Agrons, MD, DVM, C. T. Jensen, MD, A. M. Shaaban, MBChB, C. O. Menias, MD, N. A. Wagner-Bartak, MD, A. M. Roman-Colon, MD

## UR146-ED-X

## Congenital Cystic Lesions of the Genital Tract and Urethra: Embryologic and Anatomic Considerations, Differential Diagnosis

S. Takahashi, MD, Suita JAPAN, H. Ito, MD, J. Takahama, MD, Y. Ueno, MD, PhD, Y. Suenaga, U. Tanaka

## UR148-ED-X

## Upper Urinary Tract Urothelial Cell Carcinoma: Urologists and Radiologists Working Together

L. Fortuny, MD, Barcelona SPAIN, C. Sebastia Cerqueda, MD, J. Huguet, MD, M. Costa-Grau, L. Bunesch Vilalba, MD, C. Nicolau, MD

## UR157-ED-X

## All in the Family: Current Update on Genetics and Imaging of Hereditary Renal Cell Carcinomas

H. U. Shah, MBBS, MD, SAN ANTONIO, TX, B. Sannanjanja, MD, R. Vikram, MBBS, FRCP, P. Rao, S. R. Prasad, MD, C. O. Menias, MD

## UR162-ED-X

## State-of-the-art High-resolution Ultrasonography of Acute Scrotum

N. Marugami, Kashihara JAPAN, A. Takahashi, MD, T. Hirai, MD, K. Kichikawa, MD

## UR164-ED-X

## Penile Prosthetic Implants in MRI: What Every Radiologist Must Know

M. Castro, P. Sepulveda Pinto, MD, E. Gana Sr, MD, A. I. Fuentelba Cargill, MD, N. Rossel, MD, Santiago CHILE, J. P. Duran Sr, MD

## UR178-ED-X

## Diagnosis of Prostate Cancer at Multiparametric Prostate MRI: Mistakes in Interpretation

J. Yu, MD, Richmond, VA, A. S. Fulcher, MD, S. G. Winks, MD, W. C. Behl, MS, A. L. Ware, M. Brooks

## UR179-ED-X

## Dynamic US and MR of Pelvic Floor Dysfunction: New Concepts to Improve Diagnosis

N. Kurzbard-Roach, MD, Los Angeles, CA, K. Viragh, MD, R. Masamed, MD, M. L. Douek, MD, MBA, D. J. Margolis, MD, S. S. Raman, MD

## VI103-ED-X

## Techniques for Organ Displacement in Percutaneous Thermal Ablations

M. Chung, Providence, RI, J. D. Iannuccilli, MD, D. E. Dupuy, MD, S. J. Genshaft, MD

## VI104-ED-SUA7

## Left Gastric Artery: Anatomy, Variants and Clinical Applications

A. Noor, MD, New York, NY, E. Kim, MD, R. A. Lookstein, MD, S. Nowakowski, MD, R. S. Patel, MD, A. M. Fischman, MD

## VI105-ED-X

## Collateral Damage: Portal Hypertension and the Importance of Detecting Varices

R. E. Love II, MD, Burlington, VT, A. D. Bhawe, MD

## VI116-ED-X

## Plugging the Dam: How to Perform Advanced Techniques for Type II Endoleak Embolization

T. Chao, MD, K. Scherer, DO, Morristown, NJ, J. C. DeMarco, DO, J. Kee-Sampson, MD, T. M. Yablonsky, MD, S. K. Calhoun, DO

## VI119-ED-X

## Blood is in the Air(way): The Interventionalist's Guide to Managing Hemoptysis in Cystic Fibrosis

D. B. Pierce, MD, Seattle, WA, E. J. Monroe, MD, C. R. Ingraham, MD, K. Valji, MD

## VI120-ED-X

## The Creation and Utilization of 3D Printed Models for Endovascular Embolization of Visceral Aneurysms

E. Shibata, MD, Tokyo JAPAN, H. Takao, MD, S. Amemiya, MD, K. Ohtomo, MD

## VI121-ED-X

## Endovascular Management of Traumatic High Flow Priapism: How We Do It

R. F. Oser, MD, Birmingham, AL, A. K. Abdel Aal, MD, PhD, S. M. Moawad, MBCh, MSc, A. S. Moustafa, MBCh, M. Nourbakhsh, S. Saddeki, MD

## VI133-ED-X

## Evaluation of Peripheral Arterial Diseases Using Ultra High-Resolution CT

R. Tanaka, MD, Morioka JAPAN, K. Yoshioka, MD, H. Takagi, MD, PhD, S. Ehara, MD

## VI137-ED-X

## The Collateral Pathway to the Adamkiewicz Artery Visualized in Computed Tomography Angiography

T. Nishii, MD, PhD, Kobe JAPAN, S. Shimoyama, MD, Y. Watanabe, MD, A. K. Kono, MD, PhD, K. Kagawa, N. Negi, RT

## VI138-ED-X

## Embolization of Arteriovenous Malformations: Treatment Strategies and Adjunctive Techniques to Improve Results and Reduce Complications

H. Ishimaru, MD, Nagasaki Japan, S. Mine, S. Akita, I. Sakamoto, M. Morioka, MD, S. Akashi

## VI147-ED-X

## Contrast-Enhanced Ultrasound (CEUS) in Hepatic Interventional Oncology: Technique and Emerging Applications

M. Gulati, MD, B. F. Luu, MD, Los Angeles, CA, I. Lekht, MD

## VI148-ED-X

## Imaging Features in Vascular Compression Syndromes: A Case Based Pictorial Review

T. Vasconcelos Paulo Neto, MD, D. M. Haberman, MD, Buenos Aires ARGENTINA, M. Torrent, M. Volpachio, MD, C. A. Raptis, MD, F. R. Gutierrez, MD

## VI158-ED-WEA8

## Venous Sampling of Thyroid and Jugular Veins in the Case of Hyperparathyroidism: How to Proceed an Examination and to Interpret the Results

T. Yamada, MD, PhD, Yokohama JAPAN, M. Ikuno, Y. Shinjo, S. Matsushita, MD, T. Morimoto, MD, R. Kumano, MD

## VI160-ED-X

## Enhancing Radiofrequency Ablation with Contrast-Enhanced Ultrasound

E. Pang, MD, Vancouver CANADA, A. C. Harris, MBChB, S. G. Ho, MD

## VI170-ED-X

## How to Stop the Itch: IR Management of Benign versus Malignant Biliary Strictures

M. Heller, MD, San Francisco, CA, V. Kumar, MD, K. K. Devulapalli, MD, MPH, M. B. Conrad, MD, A. C. Westphalen, MD, M. W. Wilson, MD

## VI178-ED-X

## Technique of Percutaneous Direct Needle Puncture of Calcified Plaque (PIERCE Technique) in Superficial Femoral and Tibial Arteries

T. Sato, Hiroshima JAPAN, S. Ichihashi, MD

## VI183-ED-MOAG

## Percutaneous Biliary Interventions: What the Radiologist Needs to Know

M. Khalid, MD, Boston, MA, M. C. Bernal Fernandez, MD, M. J. Hsu, MD, A. S. Armetta, MD, K. M. Gallagher, MD, S. W. Anderson, MD

## VI184-ED-X

## Critical Interactions of Systemic Therapies and Liver-Directed Treatment

A. Sideris, New York, NY, H. W. Charles, MD, L. Leichman, J. Park, A. R. Deipolyi, MD, PhD

## VI185-ED-X

## Percutaneous Drainage in Infected Necrotizing Pancreatitis: First (and May Be Last) Step of Treatment and Reference Guide for Further VARD

A. Zugazaga Cortazar, MD, Barcelona SPAIN, A. Radosevic, MD, F. Bazan, G. Aguilar, J. Sanchez, MD, A. Sierra, MD

## VI186-ED-X

## CT-guided Infiltrations in Refractory Pelvic Pain Syndromes: When, Why and How?

A. I. Kastler, MD, PhD, Grenoble FRANCE, B. A. Kastler, MD, PhD

## VI191-ED-X

## Modified BRTO Techniques for the Treatment of Gastric Varices: Balloon-occluded Antegrade Transvenous Obliteration (BATO)/Vascular Plug-assisted Retrograde Transvenous Obliteration (PARTO)/Coil-Assisted Retrograde Transvenous Obliteration (CARTO)

S. Kim, MD, Saint Louis, MO, C. J. Guevara, MD, N. E. Saad, MBChB, A. Park, D. J. Kim, MD, E. W. Lee, MD, PhD

## VI205-ED-X

## Klippel-Trenaunay Syndrome: Imaging findings and Interventional Treatment Options

A. H. Lam, MD, Orange, CA, K. T. Bui, MD, J. Ton, MD, N. Abi-Jaoudeh, MD, D. Fernando, MD, K. J. Nelson, MD

## QUALITY STORY BOARD AWARDS 2016

## QS004-EB-SUA

## Implementing Pediatric CT Protocols throughout a Large, Diverse Multihospital Healthcare System

James R. Duncan, MD, PhD; Sumita Markan-Aurora, MD; Timothy Street; Mandie Street, ARRT; Sonia Gor, MPH

## QS014-EB-TUA

## Improving the Patient Experience in Breast Imaging by Using Lean Principles to Reduce Waste and Errors

Lyn Webb, RT, ARRT; Royce Ruter; Birgit Klinkhammer; Linda M. Chida, BS, RT; Ashley Rosier; Kathleen R. Brandt, MD; et al

## QS107-ED-SUB4

## Improving Access to Pediatric MR performed under General Anesthesia—Benefits of a Rapid Improvement Event

Nabeel I. Sarwani, MD; Michael A. Bruno, MD; Steve Mrozowski

## QS128-ED-THA6

## Performance Monitoring for Radiographers: Developing Key Performance Indicators that Drive Quality Improvement

Stok Mei Ng; Michael Ong; Mei Chyi Kok, BSc; Swee Ling Koh