Dear ARRS Colleagues,

What a challenging and complicated year this has been. As we take a deep breath, and look forward to re-establishing equipoise, let’s connect, learn, and advance with imaging professionals around the world at ARRS’ all-virtual 2021 Annual Meeting, April 18–22. COVID-19 has affected our specialty, and has charged us with adaptability. Now more than ever, connecting through education, learning from each other, and sharing knowledge is mandatory for those of us who plan on flourishing in this new world.

ARRS has been a leader in virtual education for more than a decade, and the 2021 all-virtual program will deliver the same clinically relevant education for which our Annual Meeting has long been celebrated: outstanding educational activities led by experts spanning every subspecialty of radiology.

As a registrant, you will have access to more than 280 hours of education—from Instructional Courses and Scientific Sessions to Categorical Courses and E-Posters—via a streamlined platform that encourages live participation and on-demand learning. Furthermore, the complete program will be available on demand for one year, so you can continue to expand your knowledge after the meeting.

During these memorable and unique times, I continue to be inspired by my colleagues throughout the health enterprise. My fellow radiologists are optimistic and creative, perpetually showing their innovative and flexible spirit—tinkerers and creative spirits who are committed to the spirit of experimentalism and to solving problems. I am counting on our convening in person someday soon; in the meantime, however, I look forward to connecting virtually, as we collectively elevate each other and brightly illuminate our collective future.

On behalf of the oldest radiological society in North America, I invite you to join us for the all-virtual 2021 ARRS Annual Meeting and what promises to be yet another memorable and historic meeting experience.

Alexander Norbash, MD
120th ARRS President
In 2021, the ARRS Annual Meeting is coming to you as an all-virtual event—April 18–22. ARRS has been a leader in virtual education since 2011 and continues to offer radiology's most flexible and streamlined meeting experience. With more than 280 hours of education and the comprehensive program available on-demand for one year, you can meet the spectrum of your educational needs—on your schedule.

In 2021, the ARRS Annual Meeting is coming to you as an all-virtual event—April 18–22. ARRS has been a leader in virtual education since 2011 and continues to offer radiology's most flexible and streamlined meeting experience. With more than 280 hours of education and the comprehensive program available on-demand for one year, you can meet the spectrum of your educational needs—on your schedule.
A SINGULAR VIRTUAL MEETING EXPERIENCE

Live and On Demand

The 2021 ARRS Annual Meeting will be an all-virtual event delivering the same distinguished Annual Meeting program that ARRS is known for—featuring clinically relevant education, presented by renowned faculty from around the world. Participate live and interact with faculty in real time, then leverage on-demand sessions and e-posters to extend your learning, on your schedule.

MORE THAN 130 SESSIONS

From Instructional Courses and Scientific Sessions to Categorical Courses and E-Posters, the 2021 Meeting will feature our complete program of over 130 sessions across all the subspecialties—all available for one year on demand.

Instructional Courses: Practice-based presentations on specific radiology topics will be delivered by expert faculty.

Scientific Sessions: Oral presentations on scientific papers will provide the latest research in medical imaging.

Categorical Courses: Participate in one or both Categorical Courses, *Ultrasound: Core and Emerging Techniques and Concepts* and *Practical Dual-Energy CT Throughout the Body: A Busy Radiologist’s Primer*.

“INCREDIBLE PROGRAMS WITHIN EVERY SUBSPECIALTY OF RADIOLOGY.”

—JONATHAN LEWIN, MD, EMORY UNIVERSITY
SUBSPECIALTY AREAS
- Breast Imaging
- Cardiac Imaging
- Chest Imaging
- Emergency Radiology
- Gastrointestinal Imaging
- Genitourinary Imaging
- Musculoskeletal Imaging
- Neuroradiology
- Noninterpretive Skills
- Nuclear Medicine
- Pediatric Imaging
- Ultrasound
- Vascular and/or Interventional Radiology

MORE THAN 300 E-POSTERS
Many Offering Credit
Hundreds of E-Posters are available on demand to enhance your core diagnostic skills. Select E-Posters offer CME/SA-CME credit.

MORE THAN 280 HOURS OF EDUCATION WITH CME
The ARRS Virtual Annual Meeting offers ample opportunity to earn credit across a variety of formats. All live sessions are eligible for CME and select sessions offer SAM credit. If you can’t make a session, don’t worry, recordings are available for all meeting sessions, and all sessions will offer on-demand credit. You can also earn credit on demand with select E-Posters.

MORE LEARNING OPPORTUNITIES
Exceptional learning opportunities are available through various activities at the ARRS Virtual Annual Meeting, including the Case Challenge, Corporate Symposia, Abstracts, and the Virtual Connection Quad. Visit arrs.org/meeting to view more information about the meeting.

FEATURED EDUCATIONAL TRACKS

Radiology Review Track
This educational track offers a broad review of cases across 11 subspecialties. Each session addresses one subspecialty and contains 60 minutes of case review and 30 minutes of didactic lecture. The rapid-fire case review will provide an even more comprehensive review of cases with limited differential diagnoses. Registrants can participate in these sessions at no additional cost—it’s all part of your general registration fee.

Resident Track
This track will highlight content of particular value to in-training radiologists and will cover a wide variety of subspecialty domains, physics problems, and noninterpretive skills.
THE COMPLETE MEETING
280 Hours of Education at Your Fingertips

The 2021 Virtual ARRS Annual Meeting offers an abundance of learning opportunities, and now with our enhanced on-demand features, you don’t have to choose. Experience each session and maximize every CME/SA-CME credit opportunity after the meeting until April 22, 2022.

E-POSTERS
Select E-Posters offer credit on demand.
E-Posters covering educational and scientific topics across 13 subspecialties will be available following the meeting for 1 year. Simply view the posters and answer the corresponding questions to earn your credit.

SESSION RECORDINGS ON DEMAND
Credit offered for every session!
View recordings of every Virtual Annual Meeting session following the meeting for 1 year and earn on-demand credit. Simply watch the recordings and complete the evaluations to earn your credit. You can even earn Self-Assessment credit for select sessions.

Now 1 YEAR of on-demand access with credit!
“THE CONTENT OF THE MEETING IS CONTEMPORARY, IT’S CURRENT, IT’S CONTINUOUSLY UPGRADED.”

—JONATHAN KRUSKAL, MD
Beth Israel Deaconess Medical Center

GROUNDBREAKING RESEARCH

Search hundreds of abstracts by author, keyword, or subspecialty to dive into the latest original research. The 2021 Abstracts will be available to view at the start of the meeting on Sunday, April 18.

It’s all a part of your ARRS Virtual Annual Meeting experience, and we don’t want you to miss a single thing!

YOUR ARRS MEETING PORTAL

This streamlined platform will allow you to access the entire ARRS Virtual Annual Meeting from any device and take advantage of everything the meeting has to offer—available to registrants for one year.

- Claim credit
- View live streaming and interact with faculty
- Access on-demand education
- Leverage online networking opportunities
- And more!
SUNDAY, APRIL 18 FEATURED EVENTS

SRS Guest Speaker Program:
The History of Radiology Journals
8:30–9:30 am
M. Huckman
This session will look at the history of radiology journals as new technology has emerged through the years.

Teaching in the Time of COVID
and Beyond: Innovative Strategies and Practical Tips
10:00 am–12:00 pm
This session will bring together experts in the field of education to share best practices that can be applied in the current COVID pandemic and beyond. An open forum panel discussion at the end of the session will enable a free exchange of ideas with individualized problem-solving from both the experts and other attendees.

AJR Year in Review
1:00–2:00 pm
O. Awan, F. Giganti
Presented by the 2021 ARRS Figley and Rogers Fellows in Radiology Journalism, this session will highlight noteworthy AJR articles of 2020.

2021 GLOBAL EXCHANGE

Featuring Argentina
Imaging Cardiovascular Disease: The Argentina/USA Experience
10:00 am–12:00 pm
F. Gutierrez, P. Carrascosa, L. Dragonetti, A. Bienhols, H. Bedi, S. Rossini
The purpose of this multimodality, multispecialty presentation is to highlight the similarities and differences in diagnostic approaches to common presentations and challenges of cardiovascular diseases.

AJR: Publishing in the Yellow Journal
10:00 am–12:00 pm
A. Rosenkrantz, W. Yang, Y. Chang, N. Schieda
This session will provide AJR authors, reviewers, and readers with an overview of the journal today, focusing on recent changes and highlighting key aspects of peer review and production processes.

Practical Guide to Health Equity
in Clinical Practice
1:00–3:00 pm
N. Saffar, R. Carlos, S. Obeng-Gyasi, G. Sadigh, E. Flores, A. Moriarty, A. Patel
This course will assist participants with addressing the disparities in radiology services and the impact on health outcomes. Course faculty will address practical facilitators and barriers to achieving health equity in radiology and provide how-to tips for integrating the concept of health equity in everyday radiology practice.

Understanding MR Safety
Through AI Software Simulation
10:00 am–12:00 pm
E. Kanal
By utilizing and emphasizing graphic and visual AI software, this course will dissect out the primary energies and fields used in the MR imaging process, explain their associated unique safety risks, and focus on methodology as to how to assess and even quantify these potential risks associated with MR scanning of various foreign bodies, implants, and medical devices.

Breakthroughs in Nuclear Medicine for Neurology and Oncology
Presented in cooperation with the Society of Nuclear Medicine and Molecular Imaging
10:00 am–12:00 pm
P. Kuo, K. Zukotynski, D. Yoo
From FDA approval of tau PET to FES PET for breast cancer, and much more, this course will provide insights into recent breakthroughs in nuclear medicine for neuroradiology and oncology, and will discuss how these changes will impact medical imaging and patient care.

RADS Fundamentals
10:00 am–12:00 pm
V. Chemyak, A. Kamaya, A. Bader, K. Fowler
Part 2: How to Integrate Into Our Practice?
1:00–3:00 pm
A. Kielar, J. Yee, K. Maturen, N. Tan
This two-part course will review the fundamentals of various RADS including in the thyroid, chest and abdomen. The emphasis will be placed on practical application of each of the systems, with a lecture dedicated to incorporating RADS in practice.

Venous Disease: Exploration of Advances, Challenges, and Future Directions
1:00–3:00 pm
R. Winokur, C. Ingraham, J. Moriarty, R. Srinivasa, J. Chick
This course will cover the impact of recent trials, techniques, and devices used for the treatment of venous disease, and will provide a look forward into the future of venous disease treatment.

2021 GLOBAL EXCHANGE

Featuring Mexico
Tuberculosis: From Head to Toe
1:00–3:00 pm
M. Palacios Montesinos, L. Alva Lopez, O. Quiroz Castro, A. Chhabra, N. Rodriguez Pedraza, C. Zamora
Imaging plays a central role in the diagnosis and management of tuberculosis (TB), a disease that infects approximately 25% of the world population. This course will cover manifestations of TB throughout the body, combining expertise from the Mexican Society of Radiology and Imaging and ARRS faculty.
Resident Symposium: Financial Literacy for Radiologists—Addressing an Underrecognized Cause of Physician Burnout
1:00–3:00 pm
G. Mitchell, S. Chan, C. Walker, J. Donald
Delivered by radiologists, this course will introduce financial topics pertinent to trainee and staff radiologists to increase their financial literacy with the hope to decrease physician burnout and stress.

Crossroads of Computational Science and Musculoskeletal Imaging: Where Machine Magic Can Aid Radiologists
3:30–5:30 pm
O. Ashikyan, J. Burns, M. Chalian, M. Richardson, S. Gyftopoulos, A. Chhabra, N. Subhas, B. Do
This course will discuss how computational techniques relate to clinical practice of musculoskeletal radiology and how these can be used in musculoskeletal research.

SAR Disease Focused Panels: Cancer Imaging and Reporting Guidelines
Presented in cooperation with the Society of Abdominal Radiology
3:30–5:30 pm
This session will present the multidisciplinary consensus guidelines for imaging hepatocellular, pancreatic, ovarian, and prostatic cancers. The 2019 Bosniak classification for diagnosing cystic renal masses will also be presented.

Imaging Victims of Violence: Fists, Stabs, Bullets, and Blasts
3:30–5:30 pm
L. Avery, H. Maresky, N. Ditkofsky, M. Grant, E. Roberge
This course will focus on the mechanisms of injury associated with fist fights, penetrating trauma, and explosive injuries in order to understand how these translate into imaging patterns.

Clinical Effectiveness and Outcomes Research
Sponsored by the Harvey L. Neiman Health Policy Program for Clinical Effectiveness and Outcomes Research
3:30–5:30 pm
P. Sanelli, S. Kang, R. Carlos, C. Lee
This course will provide insights on the importance of clinical effectiveness and outcomes research for the future of radiology practice and facilitate engagement among radiologists and radiation oncologists to contribute to demonstrating the value of imaging in healthcare.

State of the Art Liver Imaging in Cirrhosis
3:30–5:30 pm
K. Fowler, C. Sirin, K. Elsayes, V. Chernyak
This course will provide a contemporary update on liver imaging, with an emphasis on imaging of diffuse liver diseases, practical diagnostic approach of enhancing liver lesions, pitfalls in cirrhotic livers, and the use of hepatobiliary contrast agents in cirrhosis.

Micro and Macroaggressions: How to Be an Ally
3:30–5:30 pm
N. Kagetsu, C. DeBenedectis, A. Jay, L. Deitte
This session will focus on strategies for recognizing and dealing with difficult conversations and microaggressions, and will include a variety of interactive scenarios and potential responses.
CATEGORICAL COURSE
SUNDAY, APRIL 18–TUESDAY, APRIL 20

This course will provide the latest information on the use of ultrasound to diagnose abdominal, vascular, obstetric, gynecologic, and musculoskeletal diseases and disorders. The course will cover conventional and advanced techniques and pitfalls in neck, chest, abdomen, and spine disorders in pediatric ultrasound. The latest recommendations and techniques will also be reviewed in body and vascular imaging, as well as in obstetrics and gynecology with a multidisciplinary approach, along with current concepts and diagnostic approaches with musculoskeletal ultrasound including the upper and lower extremities.

LEARNING OUTCOMES

Upon completion of the course, participants will be able to:

- Develop differential diagnoses for ultrasound findings.
- Recognize the imaging and clinical features that allow for refinement of differential diagnosis, allowing for a more specific diagnosis.
- Recognize some commonly encountered imaging artifacts in ultrasound and describe why they occur and the techniques to avoid them.
- Recognize new ultrasound technologies and describe their use in clinical scenarios.
- Outline management decisions affecting a variety of commonly encountered clinical scenarios.
- Describe strategies that assist in improving diagnosis in adult and pediatric radiology.

BOOK INCLUDED WITH COURSE REGISTRATION

Each registrant will receive the accompanying book, featuring a corresponding chapter for each scheduled presentation. An electronic copy of the book is also included. Individuals who register for the Ultrasound: Core and Emerging Techniques and Concepts after March 19, 2021 will receive the hard copy of the book after the Virtual Annual Meeting takes place. To receive the book to use with the Virtual Categorical Course, be sure to register prior to March 19, 2021.

REGISTRATION

Due to the nature and granularity of this course, a separate registration fee is required in addition to your general registration fee. To ensure your registration is complete, it is recommended registrants sign up for the Categorical Course(s) when registering for the meeting. Once a registration form has been submitted, changes to the meeting record must be processed by ARRS Meeting Services. Late requests to add the Categorical Course(s) may delay access.

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### COURSE SCHEDULE

#### SUNDAY, APRIL 18

**7:30–9:30 am**

- **Head and Neck, Chest, and Breast in Pediatric Ultrasound**
  - Role of Ultrasound in Cancer Predisposition Syndromes
    - Nancy Chauvin, MD
  - Neck Masses and Inflammation in Children and Young Adults
    - Korgun Koral, MD, MBA
  - Chest Ultrasound: Updated Principles and Applications
    - Brian Coley, MD
  - Ultrasound of the Pediatric Breast
    - Ellen Chung, MD

**10:00 am–12:00 pm**

**Abdominal Emergencies and Vascular Anomalies**

- Sonography of Acute Appendicitis and Its Mimics in Children
  - Marilyn J. Siegel, MD
- Emergent Ultrasound of the Female Pelvis
  - Helen Kim, MD
- Acute Scrotal Swelling and Pain in Pediatric Patients
  - Grace Phillips, MD
- Soft Tissue Vascular Anomalies
  - Kathryn Milks, MD

**1:00–3:00 pm**

**Spine, Advanced Ultrasound Techniques and Pitfalls**

- Ultrasound of the Neonatal Spine
  - Geetika Khanna, MD
- Role of Elastography in Pediatric Ultrasound
  - Jonathan Dillman, MD
- Pediatric Contrast-Enhanced Ultrasound
  - Misun Hwang, MD
- Common Misses and Pitfalls in Pediatric Ultrasound
  - T. Rob Goodman, MD

**3:30–5:30 pm**

**Obstetrics and Gynecology: Ultrasound and Beyond**

- Multimodality Overview of Endometriosis
  - Maitraya Patel, MD
- Fibroid Imaging and Treatment Considerations
  - Simin Bahrani, MD
- Multimodality and Multidisciplinary Approach to Imaging of Placental Accreta Spectrum Disorder
  - Liina Poder, MD
- Pitfalls in Obstetric Imaging
  - Priyanka Jha, MD

#### MONDAY, APRIL 19

**7:30–9:30 am**

- **Vascular Ultrasound: Beginner to Advanced**
  - Vascular Ultrasound: Overview, Optimization, and Artifacts
    - Gianneh Fanaanazir, MD
  - Lower Extremity Deep Venous Disease: Current Recommendations
    - Laurence Needelman, MD
  - Ultrasound Assessment of Vascular and Nonvascular Gastrointestinal Abnormalities
    - Margarita Revzin, MD
  - Caroloid Ultrasonography: From Basic Concepts to Advanced Imaging Interpretation
    - Leslie Scoul, MD

**10:00 am–12:00 pm**

**New Concepts in Ultrasound Techniques and Procedures**

- Ultrasound-Guided Procedures: CEUS and More
  - Lori Mankowski Gettle, MD, MBA
- Going Small, Thinking Big: The Potential of Microvascular Ultrasound Imaging
  - Theodore Dubinsky, MD
- CEUS in Daily Practice: Practical Applications and Tips for Success
  - David Fetzer, MD
- New Ultrasound Techniques for Chronic Liver Disease
  - Richard G. Barr, MD, PhD

**1:00–3:00 pm**

**Ultrasound: Body Updates**

- Ultrasound of Testicular and Extratesticular Scrotal Lesions
  - Wui Chong, MD
- Screening and Surveillance Ultrasound Li-RADS for Hepatocellular Carcinoma
  - Aya Kamaya, MD
- Updates in Adrenal Cyst Recommendations
  - Carol Benson, MD
- ACR TI-RADS: Tips and Challenges in Thyroid Nodule Characterization
  - Jill Langer, MD

**3:30–5:30 pm**

**Current Musculoskeletal Ultrasound: What Do I Need to Know?**

- Musculoskeletal Ultrasound: New Techniques and Clinical Usefulness
  - Theodore T. Miller, MD
- Evaluation of Lumps and Bumps: The New Paradigm
  - Jon A. Jacobson, MD
- Nerve Injuries: Acute and Chronic Findings
  - Ogonna K. Nwawka, MD
  - Andrew B. Ross, MD

#### TUESDAY, APRIL 20

**7:30–9:30 am**

- **Muscloskeletal Ultrasound: Upper Extremity**
  - Shoulder Ultrasound: Current Concepts in Rotator Cuff Anatomy and Diagnostic Approach
    - Nathalie J. Bureau, MD
  - Ultrasound Diagnosis of Common Elbow Abnormalities: What the Surgeon Wants to Know
    - Crisit N. French, MD
  - It’s All in the Wrist: Ultrasound of Common and Uncommon Abnormalities
    - Brady K. Huang, MD
  - Diagnostic Ultrasound of the Fingers: Scanning Technique, Normal Anatomy, and Pathologic Findings
    - Nicholas C. Nacey, MD

**10:00 am–12:00 pm**

- **Muscloskeletal Ultrasound: Lower Extremity**
  - Pelvis and Hip: Approach to Common Diagnoses and Intervention
    - Colin D. Strickland, MD
  - Knee Ultrasound: Common Imaging and Intervention
    - Erin Alaia, MD
  - Ankle Ultrasound: A Review of Tendon and Ligament Anatomy, Pathology, and Technique
    - Benjamin D. Levine, MD
  - Foot: Pitfalls and Pearls in Diagnostic and Interventional Ultrasound
    - Stacy E. Smith, MD

### COURSE DIRECTORS

- Marilyn J. Siegel, MD
- Maitraya K. Patel, MD
- Donna G. Blankenbaker, MD

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“BY ATTENDING THE CATEGORICAL COURSE, YOU CAN TAKE INFORMATION AND APPLY IT TO PRACTICE TOMORROW.”

—SANJEEV BHALLA, MD, Mallinckrodt Institute of Radiology
CATEGORICAL COURSE
TUESDAY, APRIL 20–THURSDAY, APRIL 22

Dual-Energy CT (DECT) has been proven to be useful in a wide variety of clinical applications, both for specific indications and in the arena of incidental findings, which are common in daily practice. After attending this course, participants will have a better understanding of the major types of DECT equipment and protocols to effectively utilize this modality in their everyday practice. For those practitioners not yet using this powerful tool, this course is an excellent introduction to ways this technology can help mitigate risks and costs of additional diagnostic testing. Avoiding delays in diagnosis will allow radiologists to better serve their patients by decreasing diagnostic uncertainty. During the case-based portion of the course, each speaker will walk through how specialized dual-energy images provided clues to the diagnosis in a variety of clinical scenarios.

LEARNING OUTCOMES
Upon completion of the course, participants will be able to:

- Summarize the basics of Dual-Energy CT (DECT) image acquisition, post processing, and issues pertaining to streamlined workflow among the various equipment vendors.
- Recognize applications of DECT that impact patient care in the outpatient, inpatient, and emergency department settings.
- Recognize how to optimize imaging protocols and improve image interpretation for neuroimaging, cardiothoracic imaging, abdominal imaging, pediatric imaging, oncologic imaging, and musculoskeletal imaging.
- Apply DECT for problem solving in common imaging conundrums and acquire an increased awareness of DECT pitfalls and challenges.

BOOK INCLUDED WITH COURSE REGISTRATION

Each registrant will receive the accompanying book, featuring a corresponding chapter for each scheduled didactic presentation. An electronic copy of the book is also included. Individuals who register for the Practical Dual-Energy CT Throughout the Body after March 19, 2021 will receive the hard copy of the book after the Virtual Annual Meeting takes place. To receive the book to use with the Virtual Categorical Course, be sure to register prior to March 19, 2021.

REGISTRATION

Due to the nature and granularity of this course, a separate registration fee is required in addition to your general registration fee. To ensure your registration is complete, it is recommended registrants sign up for the Categorical Course(s) when registering for the meeting. Once a registration form has been submitted, changes to the meeting record must be processed by ARRS Meeting Services. Late requests to add the Categorical Course(s) may delay access.

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COURSE SCHEDULE

TUESDAY, APRIL 20
1:00–3:00 pm  
DECT: What You Need to Know First
ABCs of Dual-Energy CT  Rendon Nelson, MD
Dual-Energy CT Scanner Descriptions  Aran Toshav, MD
Dual-Energy CT Dose Considerations: IV Contrast Material and Radiation  Erik Soloff, MD
Dual-Energy CT Workflow PACS vs Servers  Rajan Gupta, MD
3:30–5:30 pm  
Neuroradiology DECT
Acute Brain Conditions  Rajiv Gupta, MD
Dual-Energy CT of the Brain, Head, and Neck  Dawid Schellingerhout, MD
Dual-Energy CT Applications of the Spine  Behrang Amini, MD
Case Review  All faculty

THURSDAY, APRIL 22
7:30–9:30 am  
Genitourinary DECT
Dual-Energy CT in Renal Imaging  Jeremy Wortman, MD
Adrenal Imaging  Lisa Ho, MD
Dual-Energy CT for Gynecologic Malignancies  Priya Bhosale, MD
Case Review  All faculty
10:00 am–12:00 pm  
Musculoskeletal DECT
Gout and Arthritis  Savvas Nicolaou, MD
Imaging of Bone Marrow Edema and Hardware  Erin McCrum, MD
Case Review  All faculty
1:00–3:00 pm  
Multiorgan DECT
Pediatric Applications of Dual-Energy CT  Michael Gee, MD
Added Value of Dual-Energy CT in the Emergency Department  Aaron Sodickson, MD
Solutions to Your Dual-Energy CT Challenges  Daniele Marin, MD
Case Review  All faculty
3:30–5:30 pm  
DECT: Putting It All Together in Your Practice
Dual-Energy CT in the ED  Jennifer Uyeda, MD
Dual-Energy CT in the Outpatient Setting  Avinash Kambadakone, MD
Dual-Energy CT in the Inpatient Setting  Giuseppe Toia, MD
Case Review  All faculty

WEDNESDAY, APRIL 21
7:30–9:30 am  
Pulmonary DECT
Pulmonary Parenchyma  Myrna Godoy, MD
Pulmonary Nodules and Masses  Brett Carter, MD
Techniques and Applications in PE  Subba Digumarthy, MD
Case Review  All faculty
10:00 am–12:00 pm  
Cardiovascular DECT
Heart and Coronary Arteries  Carlo De Cecco, MD
Chest Vascular  U. Joseph Schoepf, MD
Spectral CT for Vascular Optimization in the Abdomen  Lakshmi Ananthakrishnan, MD
Case Review  All faculty
1:00–3:00 pm  
Gastrointestinal DECT
Dual-Energy CT: Implications in Liver Imaging  Amir Borhani, MD
Practical Dual-Energy Imaging of the Pancreas  Eric Tamm, MD
Abdominal Applications of Dual-Energy CT: Bowel  Mark Kovacs, MD
Case Review  All faculty
3:30–5:30 pm  
Problem Solving in Abdominal DECT
Dual-Energy CT of the Acute Abdomen  Desiree Morgan, MD
Abdominal Dual-Energy CT Contrast Considerations  Benjamin Yeh, MD
Dual-Energy CT: Pearls and Pitfalls  Zhen Jane Wang, MD
Case Review  All faculty

COURSE DIRECTORS
Priya Bhosale, MD  Daniele Marin, MD  Desiree Morgan, MD

“EVERY YEAR, I LOOK FORWARD TO THE CATEGORICAL COURSES. I THINK THEY ARE THE MOST EXCITING PART OF THE MEETING.”
—RUTH CARLOS, MD, UNIVERSITY OF MICHIGAN
RAUMOLOGY REVIEW TRACK

This educational track offers a broad review of cases across 11 subspecialties. Each session addresses one subspecialty, containing 60 minutes of case review and 30 minutes of didactic lecture. The rapid-fire case review will provide an even more comprehensive analysis of cases with limited differential diagnoses. Registrants can participate in these sessions at no additional cost—it’s all part of your general registration fee.

TUESDAY, APRIL 20
8:30 am – 10:00 am
RT01. Radiology Review: Vascular/Interventional
R. Ramaswamy, D. Abdollahian, H. Chou
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

10:30 am – 12:00 pm
RT02. Radiology Review: Nuclear Medicine
P. Bhambhvani, P. Kuo, W. Rieter, C. Shah
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

1:30 pm – 3:00 pm
RT03. Radiology Review: Genitourinary
D. Wolfman, B. Wildman-Tobriner, A. Mariano, A. Kielar
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

3:30 pm – 5:00 pm
RT04. Radiology Review: Gastrointestinal
M. Yano, O’Malley, W. Masch, S. Wang
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

WEDNESDAY, APRIL 21
8:30 am – 10:00 am
RT05. Radiology Review: Chest
D. Naeger, G. Shroff, M. Martin, A. El-Sherief
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

10:30 am – 12:00 pm
RT06. Radiology Review: Pediatric
D. Saul, W. McCullough, D. Rosenbaum, A. Khwoja
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

1:30 pm – 3:00 pm
RT07. Radiology Review: Breast
H. Ojeda-Fournier, J. Kunjummen, K. Kulkarni, B. Adrada
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

3:30 pm – 5:00 pm
RT08. Radiology Review: Musculoskeletal
H. Garner, J. Baker, J. Stensby, O. Awan
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

THURSDAY, APRIL 22
8:30 am – 10:00 am
RT09. Radiology Review: Cardiac
K. Hanneman, D. Raptis, L. Jimenez Juan, D. Vargas
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

10:30 am – 12:00 pm
RT10. Radiology Review: Ultrasound
A. Kennedy, P. Jha, G. Fananapazir, P. Wang
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

1:30 pm – 3:00 pm
K. Fink, T. Kennedy, J. Becker, M. Chapman
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

CORPORATE SYMPOSIA

ARRS Corporate Symposia are hosted by industry leaders who will bring you updates on some of the most important topics and challenges facing radiologists today. Hear from professional experts and walk away with new knowledge and perspectives you can apply to your daily practice.
**DAILY SCHEDULE**

*Explore Instructional Courses and Scientific Sessions across the spectrum of radiology and with on-demand access for a year, you can extend your learning beyond the meeting and earn CME on your schedule. View the Online Daily Schedule at arrs.org/DailySchedule and explore more information on these sessions.*

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**SUNDAY, APRIL 18**

8:30 am – 9:30 am

**SRS.** SRS Guest Speaker Program:
The History of Radiology Journals
M. Huckman
1 CME Credit

9:30 am – 10:00 am

Virtual Networking in the Connection Quad

10:00 am – 12:00 pm

**FC01.** Imaging Cardiovascular Disease:
The Argentina/USA Experience
F. Gutierrez, P. Carrascosa, L. Dragonetti, A. Bierhals, H. Bedi, S. Rossini
2 CME Credits, 2 SAM Credits

**FC02.** AJR: Publishing in the Yellow Journal
A. Rosenkrantz, W. Yang, E. Chang, N. Schieda
2 CME Credits

**FC03.** Understanding MR Safety Through AI Software Simulation
E. Kanal
2 CME Credits, 2 SAM Credits

**FC04.** Breakthroughs in Nuclear Medicine for Neurology and Oncology
P. Kuo, K. Zukotynski, D. Yoo
2 CME Credits, 2 SAM Credits

**FC05.** Teaching in the Time of COVID and Beyond: Innovative Strategies and Practical Tips
2 CME Credits

**FC06.** RADS Part 1: What, When, in Whom, and Why?
V. Chernyak, A. Kamaya, A. Bader, K. Fowler
2 CME Credits, 2 SAM Credits

12:00 pm – 1:00 pm

**Plenary Session**

1:00 pm – 2:00 pm

**RYR.** AJR Year in Review
O. Awan, F. Giganti
1 CME Credit

1:00 pm – 3:00 pm

**FC07.** RADS Part 2: How to Integrate Into Our Practice?
A. Kielar, J. Yee, K. Maturen, N. Tan
2 CME Credits, 2 SAM Credits

3:00 pm – 3:30 pm

Virtual Networking in the Connection Quad

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**FC** = Featured Course  
**IC** = Instructional Course  
**RT** = Radiology Review Track  
**SS** = Scientific Session
DAILY SCHEDULE

3:30 pm – 5:30 pm

O. Ashikyan, J. Burns, M. Chalian, M. Richardson, S. Gyftopoulos, A. Chhabra, N. Subhas, B. Do
2 CME Credits, 2 SAM Credits
SAM

FC12. Imaging Victims of Violence: Stabs, Fists, Bullets, & Blasts
L. Avery, H. Maresky, N. Ditkofsky, M. Grant, E. Roberge
2 CME Credits, 2 SAM Credits
SAM

FC13. Clinical Effectiveness and Outcomes Research
P. Sanelli, S. Kang, R. Carlos, C. Lee
2 CME Credits, 2 SAM Credits
SAM

FC14. State of the Art Liver Imaging in Cirrhosis
K. Fowler, C. Sirlin, K. Elsayes, V. Chernyak
2 CME Credits, 2 SAM Credits
SAM

FC15. Micro and Macroaggressions: How to Be an Ally
N. Kagetsu, C. DeBenedectis, A. Joy, L. Dettie
2 CME Credits, 2 SAM Credits
SAM

FC16. SAR Disease-Focused Panels: Cancer Imaging and Reporting Guidelines
2 CME Credits, 2 SAM Credits
SAM

MONDAY, APRIL 19

8:30 am – 10:00 am

IC101. Biliary Imaging
C. Moreno, M. Lubner, A. Covey
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC102. Digital Breast Tomosynthesis
E. Conant, S. Friedewald
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC103. Pitfalls In Pediatric Musculoskeletal Imaging
N. Chauvin, E. Schallert, J. Nguyen
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC104. Trauma and Emergency Imaging I
M. Patlos, M. Bernstein, F. Berger, S. Qamar
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS01. Genitourinary Imaging: Female Pelvis/Endocrine
1.5 CME Credits

SS02. How to Succeed in Research
1.5 CME Credits

9:30 am – 10:30 am

Virtual Networking in the Connection Quad

10:30 am – 12:00 pm

IC105. Imaging to Intervention: Invasive Placenta
A. Kennedy, C. Kaufman, C. Ingraham
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC106. Cardiac: CMR for Cardiomyopathies
J. Collins, K. Cummings, C. Dennie, B. Sundaram
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC107. Non-traumatic Neuroradiological Emergencies
A. Sayah, J. Talbott, L. Ledbetter, R. Radhakrishnan
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC108. MR Shoulder Update
M. Anderson, K. Davis, J. Pierce
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC109. Malpractice Update, 2021
L. Berlin
1.5 CME Credits, 1.5 SAM Credits
SAM

SS03. Genitourinary Imaging: Prostate
1.5 CME Credits

SS04. Breast Imaging
1.5 CME Credits

12:00 pm – 1:00 pm

Virtual Networking in the Connection Quad

1:30 pm – 3:00 pm

IC110. Trauma and Emergency Imaging II
J. Soto, F. Munera, A. Sheikh, M. Kumaravel
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC111. Nuclear Medicine and PET/CT: Rules and Rebels
D. Metter, H. Nadel, K. Banks, H. Agress
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC112. Advancements and Updates in Ultrasound
S. Sheth, M. Revzin, M. Frates, D. Felzer
1.5 CME Credits, 1.5 SAM Credits
SAM

IC113. Imaging to Intervention: Thoracic Outlet Syndrome
R. Iyer, C. Malone, D. Bandyk
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

The Virtual Connection Quad
Visit the central online gathering place for meeting attendees where you can chat with colleagues and make new connections. As you explore exhibits, participate in the virtual game Where’s Roentgen?, play the Wheel of Knowledge, discover the latest products and services by visiting booths and setting up appointments with exhibitors, and learn more about ARRS member services and ways to support The Roentgen Fund®.
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Speaker(s)</th>
<th>Credits</th>
<th>Resident?</th>
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<tbody>
<tr>
<td>IC114</td>
<td>Quality and Safety Core Concepts 1</td>
<td>A. Kelly, P. Cronin, H. Abujudeh, S. Bastawrous</td>
<td>1.5 CME, 1.5 SAM</td>
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<tr>
<td>SS05</td>
<td>Musculoskeletal Imaging</td>
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<td>SS06</td>
<td>Musculoskeletal Imaging</td>
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<tr>
<td>IC118</td>
<td>Techniques and Treatments in the CNS</td>
<td>U. Rassner, S. Pruthi, V. Shah, T. Amirhein</td>
<td>1.5 CME, 1.5 SAM</td>
<td>Yes</td>
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<td>IC119</td>
<td>MR Imaging of the Hip and Pelvis</td>
<td>D. Blankenbaker, J. Peterson, A. Zoga</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>SS07</td>
<td>General/Emergency Radiology</td>
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<td>SS08</td>
<td>Neuroradiology</td>
<td>1.5 CME Credits</td>
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<td>IC201</td>
<td>Commonly Missed Diagnoses in Musculoskeletal Imaging</td>
<td>D. Flemming, L. Ladd, C. Andrews</td>
<td>1.5 CME, 1.5 SAM</td>
<td>Yes</td>
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<td>IC202</td>
<td>Emergency Thoracic Imaging</td>
<td>I. Vlahos, L. Azour, R. Short, A. Bernheim</td>
<td>1.5 CME, 1.5 SAM</td>
<td>Yes</td>
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<tr>
<td>IC203</td>
<td>Abdominal PET/CT: Innovations and Implications</td>
<td>T. Wong, M. Osmon, O. James, G. Dilehay</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>IC204</td>
<td>Imaging of the Post Operative Knee</td>
<td>S. Gyftopoulos, H. Rosas, D. Rubin</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>RT01</td>
<td>Radiology Review: Vascular/Interventional</td>
<td>R. Ramaswamy, D. Abdallahian, H. Chou</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>SS09</td>
<td>Gastrointestinal Imaging</td>
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<td>SS10</td>
<td>Gastrointestinal Imaging</td>
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<td>IC205</td>
<td>Imaging to Intervention: HHT</td>
<td>C. Kaufman, G. Nesbit, J. Gemmety</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>IC206</td>
<td>HRCT 2: Advanced</td>
<td>J. Gruden, B. Elcker, S. Hobbs, M. Parker</td>
<td>1.5 CME, 1.5 SAM</td>
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**DAILY SCHEDULE**

**TUESDAY, APRIL 20**

8:30 am – 10:00 am

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<th>Course ID</th>
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3:30 pm – 5:00 pm

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<td>Neuroradiology</td>
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12:00 pm – 1:00 pm

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<th>Course ID</th>
<th>Course Title</th>
<th>Speaker(s)</th>
<th>Credits</th>
<th>Resident?</th>
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<tr>
<td>IC207</td>
<td>Pediatric Neuroradiology: Common Indications</td>
<td>B. Soares, I. Neuberger, J. Wright, C. Maxfield</td>
<td>1.5 CME, 1.5 SAM</td>
<td>Yes</td>
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<tr>
<td>IC208</td>
<td>Hear No Evil, See No Evil, Speak No Evil</td>
<td>N. Koontz, M. Jhaveri, C. Giastonbury, A. Bhatt</td>
<td>1.5 CME, 1.5 SAM</td>
<td>Yes</td>
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<tr>
<td>IC209</td>
<td>Cardiac: Valve and Device Imaging</td>
<td>P. Rajiah, A. Bierhais, S. Patel, A. Shah</td>
<td>1.5 CME, 1.5 SAM</td>
<td>Yes</td>
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<tr>
<td>RT02</td>
<td>Radiology Review: Nuclear Medicine</td>
<td>P. Bhambhvani, P. Kuo, W. Rieter, C. Shah</td>
<td>1.5 CME, 1.5 SAM</td>
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1:30 pm – 3:00 pm

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<th>Credits</th>
<th>Resident?</th>
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<tr>
<td>IC210</td>
<td>The Roentgen Fund® Honorary Lecture: Spine Imaging-What the Surgeon Wants to Know</td>
<td>E. Walker, B. Petersen, L. Shah</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>IC211</td>
<td>Evaluating Lymph Nodes</td>
<td>T. Moseley, H. Marshall, P. Li</td>
<td>1.5 CME, 1.5 SAM</td>
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<td>IC212</td>
<td>Quality and Safety Core Concepts 2</td>
<td>M. Bruno, J. Kruskal, H. Abujudeh, A. Kelly</td>
<td>1.5 CME, 1.5 SAM</td>
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## DAILY SCHEDULE

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<tr>
<th>Time</th>
<th>Event</th>
<th>Speakers</th>
<th>Credits</th>
<th>Residents</th>
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<tbody>
<tr>
<td>8:30 am – 10:00 am</td>
<td><strong>IC301. Quality in Practice 1</strong> &lt;br&gt; R. Gunderman</td>
<td>J. Langer, L. Poder, J. Wong-You-Cheong, T. Morgan</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>10:30 am – 12:00 pm</td>
<td><strong>IC305. Crash Course in Obstetric and Gynecological US</strong>  &lt;br&gt; J. Langer, L. Poder, J. Wong-You-Cheong, T. Morgan</td>
<td>M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
</tr>
<tr>
<td>10:30 am – 12:00 pm</td>
<td><strong>IC306. Treating Lung Cancer</strong>  &lt;br&gt; M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>10:30 am – 12:00 pm</td>
<td><strong>IC307. Essentials of Abdominal and Peripheral Vascular US</strong>  &lt;br&gt; C. Deurdulian, J. Pellerito, G. Joshi, M. Lockhart</td>
<td>C. Deurdulian, J. Pellerito, G. Joshi, M. Lockhart</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>10:30 am – 12:00 pm</td>
<td><strong>IC308. Role of the Radiologist in Workup of CNS Symptoms</strong>  &lt;br&gt; R. Wiggins, M. Parsons, J. Chazen, C. Torres</td>
<td>R. Wiggins, M. Parsons, J. Chazen, C. Torres</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<td>10:30 am – 12:00 pm</td>
<td><strong>IC300. ABR Update</strong>  &lt;br&gt; B. Wagner, C. Canon, V. Mathews, R. Barr</td>
<td>B. Wagner, C. Canon, V. Mathews, R. Barr</td>
<td>1.5 CME Credits</td>
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<td>3:30 pm – 5:00 pm</td>
<td><strong>Virtual Networking in the Connection Quad</strong></td>
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<td>9:30 am – 10:30 am</td>
<td><strong>SS14. Musculoskeletal Imaging</strong>  &lt;br&gt; D. Goodwin, M. Jesse, M. Mills, E. White</td>
<td>D. Goodwin, M. Jesse, M. Mills, E. White</td>
<td>1.5 CME Credits</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>Virtual Networking in the Connection Quad</strong></td>
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<tr>
<td>8:30 am – 10:00 am</td>
<td><strong>IC217. Imaging to Intervention: Lymphatic Disorders</strong>  &lt;br&gt; G. Nadolski, J. Gemmete, J. Chick, R. Srivivasa</td>
<td>G. Nadolski, J. Gemmete, J. Chick, R. Srivivasa</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC211. Imaging to Intervention: Cardiac</strong>  &lt;br&gt; J. Jacobs, D. Vargas, C. Raptis, C. Francois</td>
<td>J. Jacobs, D. Vargas, C. Raptis, C. Francois</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC212. Imaging to Intervention: Thoracic Vascular Imaging</strong>  &lt;br&gt; J. Jacobs, D. Vargas, C. Raptis, C. Francois</td>
<td>J. Jacobs, D. Vargas, C. Raptis, C. Francois</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC213. Update on Standardized Systems in the GU Tract</strong>  &lt;br&gt; M. Davenport, A. Westphalen, D. Margolis</td>
<td>M. Davenport, A. Westphalen, D. Margolis</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC214. Guidelines in Thoracic Imaging</strong>  &lt;br&gt; C. Wu, J. Ko, S. Kligerman, A. Huete</td>
<td>C. Wu, J. Ko, S. Kligerman, A. Huete</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC215. Imaging of Abdominal Emergencies</strong>  &lt;br&gt; V. Mellnick, B. Pooler, D. Katz</td>
<td>V. Mellnick, B. Pooler, D. Katz</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>IC216. Cardiac: Coronary and Thoracic Vascular Imaging</strong>  &lt;br&gt; J. Jacobs, D. Vargas, C. Raptis, C. Francois</td>
<td>J. Jacobs, D. Vargas, C. Raptis, C. Francois</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>RT03. Radiology Review: Genitourinary</strong>  &lt;br&gt; D. Wolfman, B. Wildman-Tobriner, A. Mariano, A. Kielar</td>
<td>D. Wolfman, B. Wildman-Tobriner, A. Mariano, A. Kielar</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>RT04. Radiology Review: Gastrointestinal</strong>  &lt;br&gt; M. Yano, O’Malley, W. Masch, S. Wong</td>
<td>M. Yano, O’Malley, W. Masch, S. Wong</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>SS12. Efficacy/Education/Administration/Informatics</strong>  &lt;br&gt;</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>SS13. Gastrointestinal Imaging</strong>  &lt;br&gt;</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>SS14. Musculoskeletal Imaging</strong>  &lt;br&gt;</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>SS15. Vascular/Interventional Radiology</strong>  &lt;br&gt;</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>SS16. Breast Imaging</strong>  &lt;br&gt;</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>IC302. ABR Update</strong>  &lt;br&gt; B. Wagner, C. Canon, V. Mathews, R. Barr</td>
<td>B. Wagner, C. Canon, V. Mathews, R. Barr</td>
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<td><strong>IC303. Contrast-Enhanced Imaging</strong>  &lt;br&gt; C. Comstock, C. Badve, B. Patel</td>
<td>C. Comstock, C. Badve, B. Patel</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>IC304. MR Imaging of Muscle Pathology</strong>  &lt;br&gt; D. Goodwin, M. Jesse, M. Mills, E. White</td>
<td>D. Goodwin, M. Jesse, M. Mills, E. White</td>
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<td>3:00 pm – 3:30 pm</td>
<td><strong>IC305. Crash Course in Obstetric and Gynecological US</strong>  &lt;br&gt; J. Langer, L. Poder, J. Wong-You-Cheong, T. Morgan</td>
<td>M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
</tr>
<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC306. Treating Lung Cancer</strong>  &lt;br&gt; M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
</tr>
<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC307. Essentials of Abdominal and Peripheral Vascular US</strong>  &lt;br&gt; C. Deurdulian, J. Pellerito, G. Joshi, M. Lockhart</td>
<td>M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
</tr>
<tr>
<td>3:00 pm – 3:30 pm</td>
<td><strong>IC308. Role of the Radiologist in Workup of CNS Symptoms</strong>  &lt;br&gt; R. Wiggins, M. Parsons, J. Chazen, C. Torres</td>
<td>M. Truong, B. Carter, M. Chung, F. Fintelmann</td>
<td>1.5 CME Credits, 1.5 SAM Credits</td>
<td>SAM RESIDENT</td>
</tr>
</tbody>
</table>
280 Hours of Learning on Demand
The complete meeting program—from session recordings to E-Posters—will be available on-demand for one year after the meeting. Learn and earn credit on your schedule until April 22, 2022.

RT06. Radiology Review: Pediatric
D. Saul, W. McCullough, D. Rosenbaum, A. Khwaja
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS17. Cardiac Imaging
1.5 CME Credits

SS18. Cardiac Imaging
1.5 CME Credits

12:00 pm – 1:00 pm
Virtual Networking in the Connection Quad

1:30 pm – 3:00 pm
IC309. Quality in Practice 2 / Excellence in Practice
R. Gunderman
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC310. Cardiac: Imaging for Specific Patient Populations
L. Haramati, C. Javidan-Nejad, L. Heyneman, G. Gladish
1.5 CME Credits, 1.5 SAM Credits
SAM

IC311. New Breast Imaging Topics
J. Harvey, M. Bahl, J. Hayward
1.5 CME Credits, 1.5 SAM Credits
SAM

IC312. Acute Renal and Gynecologic Emergencies
V. Chernyak, E. Remer, J. Uyeda
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

RT07. Radiology Review: Breast
H. Ojeda-Fournier, J. Kunjummen, K. Kulkarni, B. Adrada
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS19. Chest Imaging
1.5 CME Credits

SS20. Genitourinary Imaging: Adrenal/Renal
1.5 CME Credits

3:00 pm – 3:30 pm
Virtual Networking in the Connection Quad

3:30 pm – 5:00 pm
IC313. TNM Staging in Head and Neck Cancer
D. Shatzkes, A. Juliano, C. Phillips, K. Baugnon
1.5 CME Credits, 1.5 SAM Credits
SAM

IC314. MSK Tumors-Advancements in Imaging and Diagnosis
D. Wenger, B. Amini, M. Murphey
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC315. MRI of the Lesser Joints
D. Gimarc, N. Subhas, C. Chung
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC316. Imaging of the GI Tract
R. O’Malley, D. DiSantis, J. Fletcher
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

RT08. Radiology Review: Musculoskeletal
H. Gamer, J. Baker, J. Stensby, O. Awan
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS21. Breast Imaging
1.5 CME Credits

THURSDAY, APRIL 22

8:30 am – 10:00 am
IC401. Current Challenges in GU Imaging
J. Golia Pernicka, S. Silverman, K. Elsayes
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC402. CNS Tumors and Mimics
L. Wang, A. Grayev, M. Ho, S. Palasis
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC403. Chest and Heart PET/CT: Scintillating Architecture
E. Rohren, M. Nathan, R. Zeman, R. Avery
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC404. Advances in Abdominal Imaging
N. Dahiya, M. Zulfiqar, M. Ohliger
1.5 CME Credits, 1.5 SAM Credits
SAM

RT09. Radiology Review: Cardiac
K. Hanneman, D. Raptis, L. Jimenez Juan, D. Vargas
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS22. Neuroradiology
1.5 CME Credits

SS23. Musculoskeletal Imaging
1.5 CME Credits

9:30 am – 10:30 am
Virtual Networking in the Connection Quad

10:30 am – 12:00 pm
IC405. Pediatric MSK Radiology: Common Indications
S. Menashe, N. Hull, V. Ho, M. Monson
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC406. Topics in Gynecologic Imaging
M. Flusberg, O. Brook, R. Ram
1.5 CME Credits, 1.5 SAM Credits
SAM

FC = Featured Course   IC = Instructional Course   RT = Radiology Review Track   SS = Scientific Session
DAILY SCHEDULE

IC407. General and MSK US & Interventions
D. Katz, N. Dahiya, V. Dogra, Y. Endo
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC408. Non-Pulmonary Thoracic Masses
M. Hammer, J. Lichtenberger, T. Too, D. Naeger
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

RT10. Radiology Review: Ultrasound
A. Kennedy, P. Jha, G. Fananapazir, P. Wang
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS24. Efficacy/Education/Administration/Informatics
1.5 CME Credits

SS25. Vascular/Interventional Radiology
1.5 CME Credits

12:00 pm – 1:00 pm
Virtual Networking in the Connection Quad

1:30 pm – 3:00 pm
IC409. Pediatric Chest and Body Radiology: Common Indications
J. Swanson, P. Thacker, L. Linam, G. Schooler
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC410. Management of Post-Surgical Breast
L. Wang, N. Constantinou, A. Lee
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC411. Liver Imaging: Cirrhosis & Malignancy
A. Shetty, K. Fowler, A. Furlan
1.5 CME Credits, 1.5 SAM Credits
SAM

IC412. Neuroradiology Updates
J. McNally, K. Salzman, A. Flanders, J. Villanueva-Meyer
1.5 CME Credits, 1.5 SAM Credits
SAM

K. Fink, T. Kennedy, J. Becker, M. Chapman
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

SS26. Nuclear Medicine
1.5 CME Credits

SS27. Efficacy/Education/Administration/Informatics
1.5 CME Credits

3:30 pm – 5:00 pm
IC413. Tips in Interpreting the Chest Radiograph
G. Abbott, D. Raptis, R. Shah, S. Bhalla
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC414. Imaging of the Peritoneum and Retroperitoneum
R. Marks, A. Gaballah, M. Kobi
1.5 CME Credits, 1.5 SAM Credits
SAM RESIDENT

IC415. Imaging of Gynecologic Malignancies
V. Paroder, D. Ganeshan, P. Bhosale
1.5 CME Credits, 1.5 SAM Credits
SAM

IC416. Cardiac: Techniques and Approaches
K. Hanneman, C. Jokerst, P. Agarwal, S. Malik
1.5 CME Credits, 1.5 SAM Credits
SAM

SS28. Chest Imaging
1.5 CME Credits

SS29. Gastrointestinal Imaging
1.5 CME Credits
The regular registration deadline for the Virtual Annual Meeting is March 19, 2021. Late registrations will be accepted through April 22, 2021.

Audio/Video Recording Policy
Copying any presentation by camera, audio, or video recording equipment is strictly prohibited. Meeting registrants are given access to all session recordings and credit is available on demand during the meeting. Access and credit claiming continue to be available through April 22, 2022.

Need to Cancel Your Meeting Registration?
Your on-demand access to the ARRS Virtual Annual Meeting will be available through April 22, 2022. Should you still need to cancel your registration, you may cancel at any time prior to the start of the meeting. Registrations cancelled prior to March 22, 2021 will receive a full refund. After March 22, if your registration includes a Categorical Course, you will be refunded the amount of your registration minus the cost of the Categorical Course book and shipping.

ARRS Membership
ARRS membership must be current at the time of registration as well as for the duration of the Virtual Annual Meeting to receive the discounted member registration rates. If your ARRS membership has lapsed or will lapse between the date of registration and the end of the meeting, you must either renew your membership or pay the nonmember registration fees. Discounted meeting registration fees are a benefit for current ARRS members.

Nonmembers Applying for ARRS Membership for the Virtual Annual Meeting
Nonmembers may apply for ARRS membership and receive the Virtual Annual Meeting member registration fee discount. Nonmembers should submit a membership application with the Virtual Annual Meeting registration form by fax or mail prior to April 12, 2021 to receive the member registration fee discount. After April 12, you must register for the Virtual Annual Meeting at the nonmember registration rate.

Registration Confirmations
Registration confirmations are emailed to registrants. It is important to provide your email address with your registration materials to ensure receipt of your confirmation and any updates regarding the meeting. Make sure the email address provided is set up to accept messages from ARRS so your Virtual Annual Meeting communications do not go to a SPAM or junk mail folder or become blocked entirely.
Questions about registration?

Visit [arrs.org/meetingFAQs](http://arrs.org/meetingFAQs) for answers to frequently asked questions about the upcoming 2021 Virtual Annual Meeting.

<table>
<thead>
<tr>
<th>VIRTUAL ANNUAL MEETING</th>
<th>Regular Registration by 3/19/21</th>
<th>Late Registration 3/20/21 – 4/22/21</th>
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<tr>
<td>ARRS Physician Members</td>
<td>$499</td>
<td>$599</td>
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<tr>
<td>ARRS In-Training Physician Members</td>
<td>$199</td>
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<tr>
<td>ARRS Emeritus Members</td>
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<tr>
<td>ARRS Senior Radiologist Section Members</td>
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<tr>
<td>ARRS Technologist or Nurse Members</td>
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<td>Nonmembers</td>
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<tr>
<th>CATEGORICAL COURSE REGISTRATION FEES</th>
<th>ARRS Members</th>
<th>ARRS In-Training Members</th>
<th>Nonmembers</th>
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<tbody>
<tr>
<td>Categorical Course: Ultrasound</td>
<td>$200</td>
<td>$100</td>
<td>$400</td>
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<tr>
<td>Categorical Course: Dual-Energy CT</td>
<td>$200</td>
<td>$100</td>
<td>$400</td>
</tr>
<tr>
<td>Ultrasound &amp; Dual-Energy CT Categorical Courses (Categorical Course Bundle)</td>
<td>$360</td>
<td>$180</td>
<td>$720</td>
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Register online or download the registration form at [arrs.org/meeting](http://arrs.org/meeting)

**NOT YET AN ARRS MEMBER?**

**TAKE ADVANTAGE OF REGISTRATION SAVINGS & JOIN TODAY**

**APPLY ONLINE**

Go to [arrs.org](http://arrs.org) and click on Membership. Be sure to indicate on the online form that you plan to attend the ARRS 2021 Virtual Annual Meeting, and fax your registration form to ARRS at 703-729-4839, after submitting your online membership application.

**DOWNLOAD APPLICATION**

Go to [arrs.org](http://arrs.org) and click on Membership. Send the completed application with your registration form by fax to 703-729-4839 or mail both documents to: ARRS, 44211 Slatestone Court, Leesburg, VA 20176-5109.
Register by **March 19, 2021**
to receive the lowest rates!

`arrs.org/meeting`

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meeting experience.

**ARRS 2021 MEETING**
April 18–22
VIRTUAL & ON DEMAND