

The Department of Epidemiology & Biostatistics
University of California San Francisco School of Medicine

Everything You Need to Know About CT: Maximizing Quality and Safety

Thursday – Saturday

September 7-9, 2023

COURSE CHAIR

Rebecca Smith-Bindman, MD

Professor of Epidemiology and Biostatistics,
and of Obstetrics, Gynecology and
Reproductive Medicine
Director, Radiology Outcomes Research Lab
University of California, San Francisco

live stream course

<https://virtualce.ucsf.edu/computed-tomography>

2023



UCSF

Everything You Need to Know About CT: Maximizing Quality and Safety

This course features well-known experts in CT radiation and interactive live sessions with radiology leaders, prominent medical physicists, and medical society leaders. Additionally, radiology vendors will present solutions for dose optimization and dose reduction.

TARGET AUDIENCE

Physicians, Radiologists, Medical Physicists, Radiologic Technologists, Administrators, Patients, Nurses, Students, and Advanced Practice Professionals.

OBJECTIVES

Upon completion of this course, attendees will refine their approaches to:

- Select imaging protocols and tailor each examination based on the clinical question, with the goal of achieving high image quality and dose as low as possible, appreciating the tradeoffs between various technical parameters
- Promote radiation dose optimization within any imaging environment, from small radiology department to large healthcare system
- Implement best practices derived from organizations that have optimized radiation doses
- Implement dose optimization strategies in specific areas of neuro- and abdomen imaging
- Tailor examinations for special populations, including pregnant women, children, and small and large patients
- Consider an individual patient's imaging history in decisions around repeat imaging
- Comply with current mandates established by The Joint Commission for radiation dose monitoring in CT
- Use a clinical quality measure to drive quality improvement in pediatric CT
- Analyze specific CT cases for insights to improve quality and reduce dose, identifying errors and solutions
- Anticipate patients' concerns around CT radiation and communicate about risk
- Implement strategies for managing a large CT department
- Improve communication between radiologists and technologists
- Understand novel uses of AI in CT imaging to assess image quality and facilitate radiation dose reduction, among other use cases

ACCREDITATION

The University of California, San Francisco School of Medicine (UCSF) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

UCSF designates this live activity for a maximum of **25.25 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This CME activity meets the requirements under California Assembly Bill 1195, continuing education and cultural and linguistic competency.

American Society of Radiologic Technologists

This activity is approved for credit by the ASRT.

Commission on Accreditation of Medical Physics Education Programs

This course has been approved by CAMPEP for MPCEC hours.

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Everything You Need to Know About CT:

THURSDAY, SEPTEMBER 7, 2023 *All times shown in Pacific Time*

7:25 am	Meet the Professors: Dr. Matthew Zygmont	Dr. Matthew Zygmont
7:50	Welcome and Introduction	Dr. Rebecca Smith-Bindman
BEST PRACTICES OF ORGANIZATIONS THAT OPTIMIZE DOSE		
8:00	Radiation From Medical Imaging: A Hidden Epidemic	Dr. Rebecca Smith-Bindman
8:45	CT Dose Management – It Takes a Village	Dr. Pavlina Boxx
9:30	Quality Improvement Approach for Compliance and Dose Management	Dr. Matthew Zygmont
10:30	<i>Break</i>	
10:40	Radiation Risk Estimation, and Radiation Concerns in Frequent Flyer Patients: Can Imaging History Influence Decisions About Recurrent Imaging?	Dr. Aaron Sodickson
11:25	Best Practices of Organizations with Optimized Doses	Dr. Rebecca Smith-Bindman
12:10 pm	Strategies for Dose Optimization: Views from Health Care System	Dr. Rebecca Smith-Bindman
12:55	<i>Lunch Break</i>	
1:30	Radiation Dose, Image Quality, and Utilization: Practical Tips and Clinical Practice Improvement Strategies for Neuroimaging	Dr. Rajiv Gupta
2:15	Joint Commission: Perspectives on Radiation Dose and Radiology	Dr. Andrea Browne
3:00	<i>Break</i>	
3:10	The Use of Multiple Phase Scanning: Do Less	Dr. Rebecca Smith-Bindman
3:40	NQF Pediatric Measure	Missy Danforth
4:25	Meet the Professors: Dr. Pavlina Boxx	Dr. Pavlina Boxx
4:50 pm	<i>Adjourn</i>	

FRIDAY, SEPTEMBER 8, 2023

KEY CONCEPTS IN DOSE MANAGEMENT / DOSE REDUCTION: OPTIMIZING PROTOCOLS & CONSIDERATIONS

7:35 am	Meet the Professors: Dr. Aaron Sodickson	Dr. Aaron Sodickson
8:00	How to Make Your Scanner Sing: Protocol Optimization for High Quality at Low Dose	Dr. Aaron Sodickson
8:45	Artificial Intelligence, Radiation and CT Image Quality	Dr. Eliot Siegel
9:30	Dual Energy CT: How it Works and How it Adds Clinical Value	Dr. Aaron Sodickson
10:15	<i>Break</i>	
10:25	Optimizing Doses for Abdomen Imaging: Urograms, Stones, Trauma, Pain	Dr. Ramit Lamba
10:50	Focus on Patients Who Receive Particularly High Doses Over Time	Dr. Madan Rehani
11:35	Abdominal CT Guidance Procedures – Tricks of the Trade for Reducing Dose	Dr. Ramit Lamba
12:00 pm	<i>Lunch Break</i>	

Maximizing Quality and Safety live stream course

FRIDAY, SEPTEMBER 8, 2023 (CONTD)

12:30	Practical Dose Optimization in Children	Dr. Samuel Brady
1:15	Dose Optimization and Appropriate Imaging in Non-Gynecologic Acute Abdomen in Pregnancy	Dr. Ramit Lamba
1:40	Strategies for Optimizing CT Doses in Pregnant Patients	Dr. Mannudeep Kalra
2:20	<i>Break</i>	
2:30	How To Tailor Doses for Small/Large, Pregnant, and Child Patients	Dr. Tim Szczykutowicz
3:15	Case-based Learning: Improving Quality and Reducing Dose	Dr. Mannudeep Kalra
4:15	Meet the Professors: Dr. Madan Rehani	Dr. Madan Rehani
4:40 pm	<i>Adjourn</i>	

SATURDAY, SEPTEMBER 9, 2023

PATIENT COMMUNICATION AND THE ROLE OF TECHNOLOGIST

7:35 am	Meet the Professors: Dr. Mannudeep Kalra & Collaborators	Dr. Mannudeep Kalra & Collaborators
8:00	Risk of Cancer from Medical Imaging	Dr. Amy Berrington de González
8:45	Why Radiation Dose is Important to Patients: Perspective of a Mother and a Cancer Health Services Researcher	Dr. Debra Ritzwoller
9:30	<i>Break</i>	
9:40	Communicating the Radiation Risk of CT Imaging	Dr. Jeffery Shyu
10:25	Strategies for Managing a Large CT Department: Communication and Standard Work	Dr. Phuong-Anh Duong
11:10	Strategies for Improving Radiologist-Technologist Communication	Dr. Phuong-Anh Duong
11:55	<i>Lunch Break</i>	

FOLLOWING BEST PRACTICES

12:25 pm	Key Concepts in Radiation Dose Management in CT	Dr. Tim Szczykutowicz
1:10	Assigning Patients to Protocols: How We Do It	Dr. Ramit Lamba
1:35	Concrete Strategies I Can Take as a Technologist to Ensure I am Using the Lowest Dose Techniques	Dr. Tim Szczykutowicz
2:20	Routine Abdomen CT: How Often are Dose Optimization Approaches Followed?	Dr. Rebecca Smith-Bindman
2:45	<i>Break</i>	
2:55	Radiation from PET-CT: Where are We as a Field?	Dr. Benjamin Lewis Franc
3:40	How AI Helps in CT Protocol and Dose Optimization	Dr. Mannudeep Kalra
4:25	Practical Approaches to Monitoring and Optimization of Patient Dose in CT	Dr. Pavlina Boxx
5:10	Meet the Professors: Dr. Tim Szczykutowicz	Dr. Tim Szczykutowicz
5:35 pm	<i>Adjourn</i>	

**University of California,
San Francisco**
Office of Continuing
Medical Education
UCSF Box 0742
490 Illinois St, Floor 8
San Francisco, CA 94143

COURSE CHAIR

Rebecca Smith-Bindman, MD
Professor of Epidemiology and Biostatistics, and of Obstetrics, Gynecology and Reproductive Medicine
Director, Radiology Outcomes Research Lab
University of California
San Francisco

FEATURED SPEAKERS

Mannudeep K. Kalra, MD
Professor of Radiology, Harvard Medical School
Radiologist, Division of Thoracic Imaging & Intervention
Massachusetts General Hospital
Boston, MA

Eliot Siegel, MD
Professor and Vice Chair, Department of Diagnostic Radiology, University of Maryland School of Medicine; Chief of Radiology and Nuclear Medicine, Veterans Affairs Maryland Healthcare System
Baltimore, MD

Aaron Sodickson, MD, PhD
Division Chief
Emergency Radiology;
Associate Professor of Radiology
Harvard Medical School
Boston, MA

Tim Szczykutowicz, PhD, DABR
Associate Professor of Radiology
University of Wisconsin
Madison, School of Medicine and Public Health
Madison, WI

COURSE FACULTY

Amy Berrington de González, MD
Branch Chief and Senior Investigator,
Division of Cancer Epidemiology and Genetics, and Radiation Epidemiology
National Cancer Institute

Samuel L. Brady, PhD
Clinical Medical Physicist,
Department of Radiology and Medical Imaging
Cincinnati Children's Hospital,
Cincinnati, OH

Pavlina Boxx, PhD, DABR
Director of Radiation Safety
Medical Physicist
Radiation Safety Officer
Huntsville Hospital, Huntsville, AL

Andrea Browne, APRN
Certified Nurse Practitioner,
Northwestern Medicine
Chicago, IL

Missy Danforth
Vice President of Health Care Ratings, The Leapfrog Group,
Washington, DC

Phuong-Anh T. Duong, MD
Associate Professor
New York University,
Langone Health
New York, NY

Rajiv Gupta, MD, PhD
Associate Professor of Radiology, Harvard Medical School; Associate Radiologist, Divisions of Neurology and of Emergency Radiology, Massachusetts General Hospital
Boston, MA

COURSE FACULTY (CONTD)

Ramit Lamba, MBBS, MD
Professor
Department of Radiology;
Chief, Division of Abdominal Imaging; Interim Chief,
Division of Cardiothoracic Imaging;
Director of CT
University of California, Davis
Davis, CA

Benjamin Lewis Franc, MD
Professor of Radiology –
Nuclear Medicine and Molecular Imaging, Stanford University
Stanford, CA

Madan Rehani, MD
Director, Global Outreach for Radiation Protection Program
Chair, Radiation Safety Committee,
Massachusetts General Hospital,
Harvard Medical School
Boston, MA

Debra P. Ritzwoller, PhD
Economist and Senior Investigator
at the Institute for
Health Research, Kaiser
Permanente Colorado
Denver, CO

Jeffery Y. Shyu, MD, MPH
Radiologist
Brigham and Women's Hospital
Boston, MA

REGISTRATION FORM • MEP24005

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Live Stream Conference

Mail to : UCSF Office of CME
490 Illinois Street, Floor 8
San Francisco, CA 94143

Online registration:
<https://virtualce.ucsf.edu/computed-tomography>
Registration Information: (415) 476-5808
Course Information: (415) 476-4251

Dr. Ms. Mr. Mrs. Mx.

LAST NAME FIRST M.I.

DEGREE SPECIALTY

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REGISTRATION FEES

- \$200** Physicians / Radiologists
- \$150** Medical Physicists
- \$100** Radiology Technologists / Advanced Practice Professionals
- \$50** Students / Trainees

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Refund Policy: Cancellations received in writing by **September 1, 2023** will be refunded, less a \$25 administrative fee. No refunds will be made on cancellations received after that date.

Please check our website for up to date information on the course:

<https://virtualce.ucsf.edu/computed-tomography>

GENERAL INFORMATION

Pre-registration is preferred to ensure that you receive log-in information prior to the start of the course.

HOW TO ENROLL

- Tuition: **\$200** Physicians / Radiologists
- \$150** Medical Physicists
- \$100** Nurses/ Pharmacists /
Advanced Practice
Professionals
- \$50** Students / Trainees

Payment can be made by Visa, MasterCard, AmEx or check.

REFUND POLICY

Cancellations received in writing by **September 1, 2023** will be refunded, less a \$25 administrative fee. No refunds will be made on cancellations received after that date.

REGISTER VIA:

Online: [cme.ucsf.edu](https://virtualce.ucsf.edu)

Mail: Complete course registration form and send with payment to:
UCSF Office of Continuing
Medical Education
490 Illinois Street, Floor 8
San Francisco, CA 94143

Phone: To register by phone or to inquire about registration status, please call UCSF's CME Registration Office at (415) 476-5808.

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