



NATIONAL
CANCER
INSTITUTE

State of Data Science in Radiation Oncology Workshop

Thursday, July 25th, 2019 | 8:30 am - 4:30 pm

Room 620/630/640

John Edward Porter Neuroscience Research Center (Building 35A)

National Institutes of Health

Bethesda, MD

AGENDA

7:30 am – 8:30 am **Registration/Check in**

8:30 am – 9:00 am **Welcome and Overview**

Anshu Jain, MD

NCI/FDA Fellow

Radiation Oncology Branch, Center for Cancer Research, NCI

Kevin Camphausen, MD

Senior Investigator and Head, Imaging and Molecular Therapeutics Section

Radiation Oncology Branch, Center for Cancer Research, NCI

Michelle Berny-Lang, PhD

Program Director, Center for Strategic Scientific Initiatives, NCI

9:00 am – 10:30 am **Session 1: Data Infrastructure**
Moderator: Sanjay Aneja, MD

The Cancer Research Data Commons

Erika Kim, PhD

Program Manager, Cancer Informatics Branch

Center for Biomedical Informatics & Information Technology, NCI

The Cancer Imaging Archive (TCIA)

Justin Kirby

Technical Director, Cancer Imaging Informatics Lab

Frederick National Laboratory for Cancer Research

Roadmap to Robust Institutional Data Infrastructure

Sanjay Aneja, MD

Assistant Professor, Department of Therapeutic Radiology

Yale School of Medicine

Informatics and Infrastructure: The Development of Oncospace

Harry Quon, MD

Associate Professor, Department of Radiation Oncology

Johns Hopkins School of Medicine

Panel and Q&A

10:30 am – 10:45 am BREAK

**10:45 am – 12:15 pm Session 2: Real World Data and Evidence
Moderator: Anshu Jain, MD**

Data Initiatives in Cooperative Oncology Groups

Adam Dicker, MD, PhD, FASTRO, FASCO
Enterprise SVP, Professor & Chair of Radiation Oncology
Director, Jefferson Center for Digital Health & Data Science
Sidney Kimmel Cancer Center, Thomas Jefferson University

NCI SEER Radiation Oncology Linkage

Clara Lam, PhD, MPH
Mathematical Statistician, Surveillance Research Program
Division of Cancer Control & Population Sciences, NCI

Cancer Imaging, Radiomics, and Data Standards

Caroline Chung, MD, MSc
Associate Professor, Department of Radiation Oncology
Director of Advanced Imaging, Director of Imaging Technology and
Innovation
MD Anderson Cancer Center

Platforms for Patient Real World Data and Imaging:

PDS/FDA Collaborations

Martin Murphy, DMedSc, PhD, FASCO
Chief Executive Officer
Project Datasphere (PDS)

Panel and Q&A

12:15 pm – 1:15 pm LUNCH (on your own)

**1:15 pm – 3:30 pm Session 3: AI Applications in Radiation Oncology
Moderator: Clifton “Dave” Fuller, MD, PhD**

Informatics and AI: Educational Initiatives

Clifton “Dave” Fuller, MD, PhD
Associate Professor, Department of Radiation Oncology
Associate Director of MR Programmatic Development
MD Anderson Cancer Center

Applications of AI to Real World Data in Radiation Oncology

Chris Ahern, PhD
Senior Data Scientist
Oncora Medical

Data and Quality Assurance

Ying Xiao, PhD
Professor, Department of Radiation Oncology
University of Pennsylvania Perelman School of Medicine

Informatics in Planning and Evaluation

Todd McNutt, PhD

Associate Professor, Department of Radiation Oncology

Johns Hopkins School of Medicine

Improving RO Clinical Trial Enrollment through NLP/Machine Learning

Nadine Housri, MD

Assistant Professor, Department of Therapeutic Radiology

Yale School of Medicine, Co-founder and CMO of theMednet.org

Panel and Q&A

3:30 pm – 4:00 pm

Future Educational and Clinical Opportunities

Society Perspectives for Future Educational Opportunities

Ronald Ennis, MD

Professor, Department of Radiation Oncology

Rutgers Cancer Institute New Jersey

ASTRO Board of Directors

4:00 pm – 4:30 PM

Final Discussion and Wrap-Up

4:30 pm

Adjournment