# 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

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<td>7:30 am – 8:30 am</td>
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<td>8:30 am – 9:00 am</td>
<td>Welcome and Overview</td>
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<td>9:00 am – 10:30 am</td>
<td>Session 1: Data Infrastructure</td>
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<td>Moderator: Sanjay Aneja, MD</td>
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**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

**Session 1: Data Infrastructure**

**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**
10:45 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