NCI Imaging and Informatics Community Webinar

NEWS

Starting in Fall 2023, the monthly NCI Imaging Informatics Webinar will be organized by the Cancer Imaging Program (CIP).

Information about upcoming webinars can now be found at https://imaging.cancer.gov/imaging_webinar/default.htm

Information about upcoming webinars will also be distributed via the Google group.

This wiki page will continue to provide slides and recordings for all webinars between 2012 and April 2023.

- NEWS
  - Information about upcoming webinars can now be found at https://imaging.cancer.gov/imaging_webinar/default.htm
- Join the Google Group for Up-to-Date Information
- Presentations and Recordings from Previous Webinars

Join the Google Group for Up-to-Date Information

Google Group
https://groups.google.com/forum/#!forum/nci-imaging-community-call

Presentations and Recordings from Previous Webinars

Presentations can be found at SlideShare. Some documents on this page are not Section 508 compliant. To receive a compliant document, please email NCI Application Support.

2023 webinars	2020 webinars	2017 webinars	2014 webinars
2022 webinars	2019 webinars	2016 webinars	2013 webinars
2021 webinars	2018 webinars	2015 webinars	2012 webinars

Date	Agenda	Recording
10 Apr 2023	**AI in Cardiovascular Imaging** **Dr. Tim Leiner (Mayo Clinic)** Machine learning and especially deep learning hold great promise to improve patient care. In several domains, algorithms perform as good as or better than fellowship trained radiologists for identification of abnormalities in clinically acquired images. However, there are much broader applications beyond image analysis such as patient selection and examination scheduling, image acquisition and reconstruction, using image data for prognostic purposes, and combing image data with information from electronic health records, laboratory and genetic data. Furthermore, in order for algorithms to be broadly accepted, there are many scenarios where it is important for the clinician that results are explainable. In addition, clinical deployment and workflow should be taken into consideration when designing the algorithm and bringing it to clinical practice. In my lecture I will focus on these aspects from a cardiovascular imaging perspective.	Recording Transcript

06 Mar 2023	**ChatGPT and the potential healthcare implications of large language models** George Shih, MD, Weill Cornell Medicine ChatGPT has exploded into our world and it has the potential to be a widely available near omniscient AI, including many applications in healthcare for providers, patients, researchers, educators, students, and healthcare companies. In this talk, we'll explore examples of ChatGPT in healthcare, and discuss the potential impact and implications to stakeholders as ChatGPT evolves and improves over time.	Recording Transcript
06 Feb 2023	**Radiation Dose Reduction in CT and its Effects on Quantitative Imaging and Machine Learning/Artificial Intelligence Algorithms** Dr. Michael McNitt-Gray, UCLA CT is widely used in clinical practice with applications ranging from early detection (screening), characterization (diagnosis) and assessment of response to therapy. There has been widespread concern over the radiation dose associated with these scans, especially on pediatric patients or patients who get frequent scans. There have been significant developments which allow the reduction of radiation dose from CT including developments in automatic exposure control, advanced image reconstruction techniques , more efficient detector technologies among others that promise significant radiation dose reductions to patients, while maintaining clinical image quality. While these technologies are exquisite and should be investigated wherever possible in a clinical environment, their effects on quantitative measures extracted from CT images and machine learning algorithms have not been well characterized. These technologies may affect image quality in ways that may limit the generalizability of quantitative imaging and Artificial Intelligence/Machine Learning (AI/ML) methods. For example, advanced image reconstruction methods may be able to mitigate the increase in noise that is incurred when radiation dose is reduced, but there may be some impact on image resolution. In addition, many of these techniques are non-linear and adaptive to the local image anatomy and pathology, their impacts may be difficult to predict from application to application and even patient to patient (and yes, even within a patient). This presentation will provide examples of these effects and discuss possible methods to mitigate these effects, which hopefully will enable more generalizable deployment of quantitative imaging methods and AI/ML algorithms.	Recording Transcript
05 Dec 2022	**Report of the MIDI Task Group about best practices and recommendations for medical imaging de-identification** Dr. David Clunie (Chairperson of the MIDI Task Group)	Recording Transcript Slides
07 Nov 2022	**Bringing AI from Hype to Reality for Routine Clinical Practice: Defining and Addressing the Gaps** Dr. Eliot Siegel, University of Maryland Despite the ever-increasing number of publicly available imaging databases and oncology AI/Radiomics applications that have been curated and developed over the past more than 15 years, an extraordinarily small number of AI applications are available and in use for routine clinical cancer care by radiologists, oncologists, and other healthcare providers. This is the case despite large and carefully and expertly curated and annotated databases which have been generously funded and made available by NCI and other organizations. Mammography CAD/AI has a particularly interesting and unique history and adoption curve and while it is in widespread use throughout the US, there continues to be a large gap in accuracy between the small percentage of studies interpreted by subspecialist mammographers and the vast majority of studies interpreted by general radiologists. This presentation will discuss some of the reasons for this continuing gap and lack of adoption of mammograph CAD into clinical decision making. Additionally, a combination of regulatory challenges, the lack of a paradigm for training on datasets consisting of both prior and follow-up studies, brittleness of algorithms that are not adaptive, bias due in part to lack of transparency of databases used to develop AI apps, lack of standards for consumption of on prem and off prem algorithms, multiple platforms for packaging and using applications and lack of post-market surveillance, questions about whom the algorithms should be designed for, and many other factors have hampered widespread adoption. This presentation will discuss some solutions to these challenges that could accelerate adoption of these algorithms which could substantially enhance care for oncology patients.	MP4 file Transcript Slides

03 Oct 2022	**NCI's Imaging Data Commons: Fall 2022 Update** Andrey Fedorov, Ph.D., Harvard The NCI's Imaging Data Commons (IDC) is a cloud-based repository of publicly available cancer imaging data co-located with the analysis and exploration tools and resources. IDC is a node within the broader NCI Cancer Research Data Commons (CRDC) infrastructure that provides secure access to a large, comprehensive, and expanding collection of cancer research data. In this presentation we will cover the highlights of IDC development that took place since the production release of the repository. Among other updates, we will discuss the new datasets that have been released by IDC, new features of the platform, and the ongoing work on expanding the learning materials, including the application of IDC and cloud computing to support reproducible AI research. **A cloud-based platform for the dissemination of deep learning models** Hugo Aerts, Ph.D., Harvard MGB Recent advances in artificial intelligence in medicine have led to a profusion of studies that apply deep learning to problems in radiology and pathology, among others. However, the effective dissemination of deep learning algorithms remains challenging, inhibiting reproducibility and benchmarking studies, impeding further validation, and ultimately hindering their effectiveness in the cumulative scientific progress. In this talk, we will discuss a platform we are developing for the structured dissemination of deep learning models that is domain-, data-, and framework-agnostic, and can cater to different workflows and contributors' preferences. Ultimately, these efforts will bring much-needed transparency to AI and accelerate scientific discoveries, academic training, and clinical adoption of AI applications in medicine.	MP4 file Transcript
06 Jun 2022	**Bridging the gap between prostate radiology and pathology through machine learning** Mirabela Rusu, PhD, Stanford University The subtle difference in MRI appearance of prostate cancer and benign prostate tissue renders the interpretation of prostate MRI challenging, causing many false positives, false negatives, and wide variations in interpretation. My laboratory focuses on improving the interpretation of prostate MRI by developing deep learning models that automatically localize indolent and aggressive prostate cancers on MRI scans. The novelty of our methods comes from using whole-mount pathology images to label MRI images and to create pathomic MRI biomarkers of aggressive and indolent cancers. Our approach achieved an area under the receiver operator characteristics curve of 0.93 evaluated on a per-lesion basis and outperformed existing deep learning models. In patients outside our training cohorts, such predictive models will outline the extent of cancer on radiology images in the absence of pathology images, thus helping guide the prostate biopsy and local treatment. The talk will focus on discussing recent contributions from my lab on registering whole-mount pathology images with MRI, training deep learning models to extract pathomic MRI biomarkers and using them in training deep learning models to detect and distinguish indolent and aggressive prostate cancers on MRI, and showing the benefits of using labels from pathology in training deep learning models to distinguish indolent from aggressive prostate cancer on MRI.	MP4 file Transcript
04 Apr 2022	**Machine Intelligence/Data Science in Medical Imaging of Breast Cancer and COVID-19** Maryellen Giger, Ph.D, University of Chicago Artificial Intelligence in medical imaging involves research in task-based discovery, predictive modeling, and robust clinical translation. Quantitative radiomic analyses, an extension of computer-aided detection (CADe) and computer-aided diagnosis (CADx) methods, are yielding novel image-based tumor characteristics, i.e., signatures that may ultimately contribute to the design of patient-specific cancer diagnostics and treatments. Beyond human-engineered features, deep convolutional neural networks (CNN) are being investigated in the diagnosis of disease on radiography, ultrasound, and MRI. The method of extracting characteristic radiomic features of a lesion and/or background can be referred to as "virtual biopsies". Various AI methods are evolving as aids to radiologists as a second reader or a concurrent reader, or as a primary autonomous reader. In addition, performance evaluations, as well as considerations of robustness and repeatability, are necessary to enable translation. This presentation will discuss the development, validation, database needs, and ultimate future implementation of AI in the clinical radiology workflow including examples from breast cancer and COVID-19. In addition, aspects of MIDRC (midrc.org) will be discussed.	MP4 file Transcript
07 Mar 2022	**AI/ML Trends in Oncology and the Rugged Path Towards the Clinic** Issam El Naqa, PhD, Moffit Cancer Center Artificial intelligence (AI) and Machine learning (ML) algorithms are currently transforming biomedical research, especially in the context of cancer research and clinical care. Despite the tremendous potentials in automating workflow, personalizing care, and reducing health disparity, to name a few prospects, their application in oncology and healthcare has been limited in scope with less than 5% of major healthcare providers implementing any form of AI/ML solutions. This can be attributed to multitude of concerning issues regarding the deployment of AI/ML driven technologies into the clinic. These concerns include but not limited to skepticism related to commercialization hype, under representative training data, inherent implementation bias, lack of robustness and absence of prediction transparency. In this work, we will discuss some of these impending challenges and highlight different approaches for detecting and mitigating such bias in implementing clinical AI/ML algorithms. We further show examples of applying these approaches in oncology applications from our work and others and discuss their implications to pave the way for AI/ML in clinical practice.	MP4 file Transcript

February 7, 2022	**Digital twins for oncology *via* imaging-based mathematical modeling** Thomas Yankeelov, PhD, University of Texas Austin Our lab is focused on integrating quantitative imaging data with mechanism-based, mathematical models to predict treatment response. In this presentation, we will discuss some of our preliminary efforts at building digital twins to achieve this goal. We will begin by considering the I-SPY trials for breast cancer as a specific example of how the success of adaptive, *population*-based clinical trials indicate that digital twins can lead to the success of adaptive, *individual*-based, clinical trials. Then we will emphasize the importance of physics and biology-based mathematical models for constructing digital twins. Finally, we will illustrate how these ideas are beginning to play out in predicting and optimizing neoadjuvant therapy for breast cancer.	MP4 file Transcript
December 6, 2021	**Precision Medicine Approach to Breast Cancer Detection and Diagnosis** Martin Yaffe, PhD, Sunnybrook Research Institute and The University of Toronto Dr. Yaffe will describe a multi-platform approach under investigation in his lab to improve the effectiveness of breast cancer detection and diagnosis. We are developing radiomic tools to guide the stratification of women for breast cancer screening that will be more accurate and efficient in detection than the “one size fits all” use of mammography whose accuracy suffers, particularly in dense breasts. We employ microsimulation modeling to guide that work. We are also exploring the integration of radiomic information from in vivo medical images with histopathology, single-cell multiplex biomarker analysis, and targeted molecular sequencing to better characterize breast and other cancers and their immune environment and to explore their spatial heterogeneity.	MP4 file Transcript (vtt) Transcript (txt)
November 1, 2021	**NCI CCR Artificial Intelligence Resource: Recent AI Applications in Cancer Imaging** Presenters: G. Thomas Brown, MD PhD, Staff Clinician, NCI/CCR Stephanie Harmon, PhD, Staff Scientist, NCI/CCR Nathan Lay, PhD, Staff Scientist, NCI/CCR Artificial Intelligence (AI) is becoming important for cancer research but is difficult to access for most labs. In 2020, the NCI Center for Cancer Research (CCR) created a new AI Resource (AI) to benefit researchers in the CCR. The group focuses on translational computer vision approaches to analyzing medical images, such as radiologic, digital pathology, video/endoscopy and optical imaging, among others. Examples of potential projects include developing better screening, detection methods or predictive markers, or improving procedures among many others. With experts in pathology, medical imaging, and machine learning, AIR has taken on a diverse portfolio of research projects in their first year. In this seminar, senior members of the group will discuss its formation, collaboration experience, recent progress, and challenges for deploying developed models back to the hands of researchers across varying domains in NCI.	The presentation contained unpublished data. As projects are finished and code is released, the AIR team will update the webpage. https://ostr.ccr.cancer.gov/emerging-technologies/air/ You can also email the AIR team with any questions you might have (air@nih.gov)

October 4, 2021	**Multiplexed Tissue Imaging to Study Cancer** Sandro Santagata, MD PhD Our team at the Harvard Medical School's Lab of Systems Pharmacology has generated reagents, workflows, and data analysis/visualization approaches for multiplexed tissue imaging. We developed tissue-based cyclic immunofluorescence (t-CyCIF) for subcellular imaging of formalin-fixed and paraffin-embedded (FFPE) and frozen tissues across 20-60 different proteins markers from a single tissue section. To support the use of multiplexed tissue imaging in the NCI Human Tumor Atlas Network (HTAN), we have developed algorithms and workflows to analyze these complex images, digital docents for their narrated viewing, and reporting standards for public data sharing. The information from these imaging methods complement data acquired by microregion spatial transcriptomics technologies. We have also used high-resolution imaging of tissues to identify functional interactions (e.g., immune synapses) in cancer tissues and have created multiplexed 3D cancer atlases to more completely characterize the architecture of the tumor-immune landscape in colon cancer and in melanomas, from pre-cancer lesions through metastasis. **Imaging Data Commons Production Release Update** Andrey Fedorov, PhD The National Cancer Institute (NCI) Cancer Research DataCommons (CRDC) aims to establish a national cloud-based data science infrastructure. The goal of IDC is to enable a broad spectrum of cancer researchers, with and without imaging expertise, to easily access and explore the value of deidentified imaging data and to support integrated analyses with non-imaging data. We achieve this goal by co-locating versatile imaging collections with cloud-based computing resources and data exploration, visualization, and analysis tools. The IDC pilot was released in October 2020. In this presentation, we will give a brief overview of the capabilities of the production release of the IDC platform, and discuss the next steps for the development.	MP4 file Transcript
June 7, 2021	**Medical Imaging De-Identification Initiative (MIDI)** **A DICOM dataset for evaluation of medical image de-identification** Dr. Fred Prior (UAMS) A growing number of tools and procedures claim to properly de-identify image data. Based on our decade of experience managing the Cancer Imaging Archive (TCIA) on behalf of NCI, we developed a DICOM dataset that can be used to evaluate the performance of de-identification algorithms. DICOM objects were selected from datasets published in TCIA. Synthetic Protected Health Information (PHI) was generated and inserted into selected DICOM Attributes to mimic typical clinical imaging exams. The DICOM Standard and TCIA curation audit logs guided the insertion of synthetic PHI into standard and non-standard DICOM data elements. An answer key was created based on our knowledge of the placement of synthetic data and the DICOM standard's guidelines for what actions should be taken in regard to the synthetic PHI. A TCIA curation team tested the utility of the evaluation dataset and answer key. **Medical Image De-Identification using Cloud Services** Dina Mikdadi, Dr. Benjamin Kopchick Patient privacy rules require the removal of Protected Health Information (PHI) before sharing images publicly. Manual de-identification is no longer scalable due to the rapid increase in imaging data volume. Our goal was to configure and test the efficacy of a cloud service for automated medical image de-identification (MIDI). One such service for DICOM images is Google Cloud Platform's Healthcare API. Training and test datasets for validation of image de-identification, specifically prepared by the placement of synthetic PHI in DICOM headers and image pixel data, were obtained from The Cancer Imaging Archive. The customized MIDI pipeline correctly performed 99.8% of expected actions on DICOM header data elements. For image pixel data, one false-positive case was noted, while all sensitive information was correctly removed from image pixel data. Throughput averaged at 58.4 images per second. This implementation of the MIDI pipeline holds promise for automated de-identification at scale. However, verification by a human expert is still currently recommended.	MP4 file Transcript
May 3, 2021	**Establishing next generation dynamic susceptibility contrast MRI based biomarkers for neuro-oncologic applications** Dr. Chad Quarles, PhD Dynamic susceptibility contrast (DSC) MRI is one of the most widely used physiologic imaging techniques in neuro-oncology, enabling the differentiation of glioma grades, identification of tumor components in non-enhancing glioma, reliable detection of recurrence, and early detection of therapy response. This presentation will highlight how an improved understanding of the biophysics of the contrast mechanisms underlying DSC-MRI enabled the recent standardization of acquisition protocols for multi-site clinical trials, is leading to the field's first benchmark for software validation, and is informing the development of advanced pulse sequences and analysis strategies tailored to specific clinical challenges faced in the management of brain cancer patients.	MP4 file Transcript
April 5, 2021	**Can you sue an algorithm?** Dr. Saurabh Jha (University of Pennsylvania, Perelman School of Medicine)	MP4 file Transcript

March 1, 2021	**Precision Surgery: Intraoperative molecular imaging to improve margin detection** Dr. Eben Rosenthal, Professor of Otolaryngology, Head & Neck Surgery and Radiology, Stanford University Cancer is nearly always a surgically treated disease. Almost 80% of patients with early stage solid tumors undergo surgery at some point within their treatment course. A major gap in quality of care remains the high rate of tumor-positive margins in head and neck cancer (HNC) following surgical resections. Positive margin rates are directly correlated with lower survival but have remained unchanged at 25% for the last two decades! Primary factors that have impeded improving the rate of tumor-positive margins include subjective surgeon assessment as well as the limited amount of the tissue that can be sampled for intraoperative frozen-section analysis. We have demonstrated that use of intraoperative molecular imaging (IMI) can objectively identify the area on the tumor specimen most likely to contain a tumor-positive margin ("sentinel margin"). In a prospective evaluation, a fluorescently-labeled tumor-specific contrast agent is administered intravenously to the patient several days prior to surgery. After the surgical resection, the specimen is evaluated with IMI, in which near infrared imaging is used to identify the location of the sentinel margin on the surgical specimen. This evaluation is compared to subjective assessments of the deep tumor margin by palpation, considered the standard of care. It is expected that IMI imaging will be more accurate in identifying the sentinel margin, and will shorten the time to histological diagnosis while maintaining tissue orientation and high histological image quality. The translation of these new technologies has the potential to double the five-year survival rate of patients with HNC as well offer the potential to improve care for other cancer types as well.	MP4 file Transcript
February 1, 2021	**Orchestration of distributed image archives** Jonas Almeida and Praphulla Bhawsar Recent advances in the use of HTTP range requests to traverse bioformats*, coupled with a general move to "zero footprint" image informatics solutions, enable the creation of image archives as an exercise in governance. A particular feature of this configuration is that the images do not have to be copied or moved from their primary location. This has two interesting effects: a) the image owner remains in control of its governance, and b) training of AI classifiers can be federated across image sets that are not even shared. * *Bremer E, Saltz J, Almeida JS. ImageBox 2 – Efficient and rapid access of image tiles from whole-slide images using serverless HTTP range requests. J Pathol Inform 2020;11:29*	MP4 file Transcript
December 7, 2020	**NIAID TB Bioportal** The NIAID Office of Cyber Infrastructure and Computational Biology will share their TB Portals Program, including their efforts at imaging data collection, data dissemination, tool development, and data science research. https://tbportals.niaid.nih.gov ▪ Program introduction – Alex Rosenthal ▪ Demo #1 – Alyssa Long ▪ Demo #2 – Andrei Gabrielian ▪ Imaging data science research – Ziv Yaniv & Gabriel Rosenfeld	MP4 file Transcript
November 16, 2020	**Imaging Data Commons** Andrey Fedorov, PhD, Dennis Bontempi	MP4 file Transcript
November 2, 2020	**MONAI** Stephen Aylward, Prerna Dogra, Jorge Cardoso ◦ Introduction to MONAI and the MONAI Community - Stephen Aylward ◦ MONAI medical deep learning capabilities and roadmap - Jorge Cardoso ◦ MONAI and clinical workflows: Clara and federated learning - Brad Genereaux	MP4 file Transcript
October 5, 2020	**Kheops** Joël Spaltenstein, Osman Ratib	MP4 file Transcript
September 14, 2020	**Computational Imaging for Precision Medicine: A quest for generalizable AI models** Satish Viswanath	MP4 file Transcript
July 6, 2020	**Distributed Learning of Deep Learning in Medical Imaging** Daniel Rubin • MedICI website (Benjamin Bearce)	MP4 file
June 1, 2020	**ACR's AI-LAB** Laura Coombs, Chris Treml	MP4 file

April 6, 2020	**PathPresenter - a web-based digital pathology and image viewer** Rajendra Singh, Matthew Hanna	MP4 file
January 6, 2020	**Medical Segmentation Decathlon: Generalizable 3D Semantic Segmentation** Amber Simpson	MP4 file
October 7, 2019	**Data Commons Overview** Todd Pihl **The Imaging Data Commons** Andrey Fedorov, PhD	MP4 file
September 9, 2019	**HistoQC: An Open-Source Quality Control Tool for Digital Pathology Slides** Andrew Janowczyk **RIL-Contour: a Medical Imaging Dataset Annotation Tool for and with Deep Learning** Kenneth Philbrick	MP4 file
August 5, 2019	**Advanced Methods in Tissue Cytometry** Rupert Ecker **Presentation by the 4D Necleome Imaging Working Group** David Grünwald	MP4 file
July 1, 2019	**Joint Session with the CPTAC Special Interest Group** • CPTAC Project Overview (Chris Kinsinger) • CPTAC Image Data at TCIA (Justin Kirby) • CPTAC Proteomics Data at the Proteomics Data Commons (R. Rajesh Thangudu) • CPTAC Genomic Data at the Genomics Data Commons (Ana Robles) • Using the CPTAC Data Portal (R. Rajesh Thangudu)	MP4 file
June 3, 2019	**PRISM Semantic Integration Approach** Jonathan Bona	N/A
May 6, 2019	**ITCR Update** Juli Klemm **CPTAC Special Interest Group** Justin Kirby **NBIA 7.0 GA Community Release** Scott Gustafson	N/A
March 4, 2019	**HTT: high-throughput truthing project** Brandon Gallas	N/A
January 7, 2019	**Standardized representation of the LIDC annotations using DICOM** Andrey Fedorov, PhD **Kaleidoscope: A Series Projection Visualization Tool for Review of DICOM Images for Protected Health Information** William Bennett	N/A
November 5, 2018	**CPTAC Imaging Update and new TCIA-CPTAC Pathology Portal** Brenda Fevrier-Sullivan, Ashish Sharma **DICOM meeting update** Lawrence Tarbox	N/A

December 3, 2018	**DICOM SR for LIDC collection** Andrey Federov **Kaleidoscope: A Series Projection Visualization Tool for Review of DICOM Images for Protected Health Information** William Bennett	N/A
October 1, 2018	**The SEER Virtual Tissue Repository and Pathomics** Joel Saltz **Changes to the QIN Funding Mechanism** Bob Nordstrom **TCIA Update** Christina Vivelo **MICCAI Conference Debrief** Keyvan Farahani **TCIA Submission Wizard** Kirk Smith	N/A
September 10, 2018	**Medici Helpdesk Status Update (and other projects)** Jayashree Kalpathy-Cramer **CTAC QIN** Bob Nordstrom	N/A
August 6, 2018	**Imaging Data Commons – RFI and RFP** Steve Jett, Todd Pihl	N/A
June 4, 2018	**Euro-BioImaging and the Image Data Resource** Jason Swedlow, University of Dundee	N/A
March 5, 2018	**Enabling technologies for research using clinically acquired medical image data: Clinical Image Bank and MI2B2** Randy Gollub	N/A
February 5, 2018	**Update on the Imaging Data Commons** Todd Pihl, Steve Jett **Medici Help Desk** Jayashree Kalpathy-Cramer, Karl Helmer	N/A
January 8, 2018	**Crowds Cure Cancer – project description** Justin Kirby, FNLCR	N/A
December 4, 2017	**Data Integration and Imaging Informatics Project** DI-cubed team **TCIA Data Harmonization Project** Amrita Basu **Demo of DataScope for TCIA clinical data** Ashish Sharma **Discussion on TCIA submission recommendations** Amrita Basu, John Freymann, Justin Kirby	N/A

November 6, 2017	**American College of Radiology – Data Archive and Research Tool Kit** **ACR Data and Analytics** Laura Coombs / Mike Tilkin (ACR) **Cancer Research Data Commons** Allen Dearry (NCI) **Update on the Transformation of NCI Annotation and Image Markup (AIM) and DICOM SR Measurement Templates** David Clunie	N/A
September 11, 2017	**Lung Cancer Screening Challenge** Keyvan Farahani **Scientific Overview: Volumetric Computed Tomography (CT) for Precision Analysis of Clinical Trial Results (Vol-PACT)** Lawrence Schwartz	N/A
August 7, 2017	**Data Science Bowl** Keyvan Farahani **Imaging in Immunotherapy Trials** Elad Sharon	N/A
June 5, 2017	**The XNAT imaging informatics platform** Dan Marcus	N/A
May 1, 2017	**CaPTk: The Cancer imaging Phenomics Toolkit program at the University of Pennsylvania** Christos Davatzikos	N/A
March 6, 2017	**Workshop Discussions – Informatics Needs in Medical Imaging** Bob Nordstrom & Ed Helton, NCI **An Approach to Combining Disparate Clinical Study Data across multiple sponsor's studies participating in Project DataSphere®** Gene Lightfoot, SAS	N/A
February 6, 2017	**Veterans Affairs Precision Oncology Program (POP) and APOLLO activities** Luis Selva, VA	N/A
January 9, 2017	**A Cancer Research Data Ecosystem** Warren Kibbe, NCI CBIIT	N/A
December 5, 2016	**Clinical Proteomic Tumor Analysis Consortium (CPTAC)** Chris Kinsinger	N/A
October 26, 2016	**Pathomics Based Biomarkers – Tools and Methods** Joel Saltz MD, PhD	N/A
September 12, 2016	**LesionTracker: Open-source oncology web viewer** Gordon Harris, Dana-Farber/Harvard Cancer Center	N/A

June 6, 2016	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer, Artem Mamanov) - BRIDG (David Clunie / Ed Helton)	N/A
May 2, 2016	**MAASTRO – NBIA integration with OpenClinica**	N/A
April 4, 2016	- AIM DICOM SR (Daniel Rubin) - NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer, Artem Mamanov) - CTIIP – Co-clinical / Animal model data (Bob Cardiff) - BRIDG and Imaging (David Clunie / Ed Helton)	N/A
March 7, 2016	**CTIIP NCIP Imaging Co-clinical/animal models** Bob Cardiff, UC Davis	N/A
February 1, 2016	**CTIIP NCIP Imaging Co-clinical/animal models** Bob Cardiff, UC Davis	N/A
January 4, 2016	**PESSCARA: Platform to Enable Sharing of Scientific Computing Algorithms and Research** Panagiotis Korfiatis, PhD, Bradley Erickson, MD PhD	N/A
December 7, 2015	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie / Joe Kalen) - CTIIP – Pilot Challenges (Artem Mamanov) - CTIIP – Co-clinical / Animal model data (Bob Cardiff) - Impressions from the RSNA Meeting (Justin Kirby) - CI4CC Workshop Update (Ashish Sharma and Ed Helton)	N/A
November 2, 2015	- NBIA (Russ Rieling) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie / Joe Kalen) - CTIIP – Pilot Challenges (Artem Mamanov) - CTIIP – Co-clinical / Animal model data (Bob Cardiff)	N/A
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June 1, 2015	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - CTIIP – Co-clinical / Animal model data (Bob Cardiff) - NBIA Refactoring Analysis (Lawrence Tarbox) - BRIDG and the presence of Imaging (Ed Helton, Smita Hastak)	N/A

May 4, 2015	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - Outcome of the QIN/CBIIT Imaging Informatics Workshop (Ed Helton, Jose Galvez) - AIM Working Group Update (Ulli Wagner) - Other imaging groups on NCIP Hub (Ulli Wagner)	N/A
March 2, 2015	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat) - Bioinformatics Workshop (Ed Helton, Jose Galvez)	N/A
February 2, 2015	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat) - Bioinformatics Workshop (Ed Helton, Jose Galvez)	N/A
January 12, 2015	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
December 15, 2014	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
November 3, 2014	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
October 6, 2014	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
September 8, 2014	- NBIA (Scott Gustafson) - CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) - CTIIP – DICOM WG-30 (David Clunie) - CTIIP – Co-clinical / Animal model data (Ulli Wagner) - CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) - AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A

August 11, 2014	• NBIA (Scott Gustafson) • CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) • CTIIP – DICOM WG-30 (David Clunie) • CTIIP – Co-clinical / Animal model data (Ulli Wagner) • CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) • AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
July 7, 2014	• NBIA (Scott Gustafson) • CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) • CTIIP – DICOM WG-30 (David Clunie) • CTIIP – Co-clinical / Animal model data (Ulli Wagner) • CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) • AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
June 2, 2014	• NBIA (Scott Gustafson) • CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) • CTIIP – DICOM WG-30 (David Clunie) • CTIIP – Co-clinical / Animal model data (Ulli Wagner) • CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) • AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
April 7, 2014	• NBIA (Scott Gustafson) • CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) • CTIIP – DICOM WG-30 (David Clunie) • CTIIP – Co-clinical / Animal model data (Ulli Wagner) • CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) • AIM Working Group Update (Daniel Rubin, Pat Mongkolwat) • MICCAI 2014 Pathology Challenge (Joel Saltz)	N/A
March 3, 2014	• NBIA (Scott Gustafson) • CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) • CTIIP – DICOM WG-30 (David Clunie) • CTIIP – Co-clinical / Animal model data (Ulli Wagner) • CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) • AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
February 3, 2014	• NBIA (Scott Gustafson) • CTIIP - Digital Pathology and Integrative Query System (Ashish Sharma) • CTIIP – DICOM WG-30 (David Clunie) • CTIIP – Co-clinical / Animal model data (Ulli Wagner) • CTIIP – Pilot Challenges (Jayashree Kalpathy-Cramer) • AIM Working Group Update (Daniel Rubin, Pat Mongkolwat)	N/A
November 4, 2013	**Imaging Informatics Work Group Project** Larry Clarke **Annotation and Image Markup 2013 Project Plan and Milestones** Pattanasak Mongkolwat, Ph.D.	N/A
August 5, 2013	**FDA Demo Pilot Project** Ashish Sharma **QIN HubZero Project Update** Jayashree Kalpathy-Cramer	N/A
June 3, 2013	• AIM • IVIM • NBIA • XIP/AVT • IMPHUB – a new resource	N/A

April 1, 2013	**Quantitative imaging for evaluation of response to cancer therapies** Larry Clarke	N/A
March 11, 2013	**Summary of the NCIP Imaging WG Workshop (3/5/13)** Larry Clarke **MICCAI Challenges** Joel Saltz	N/A
October 1, 2012	• ATS and ATB release • NBIA 5.1 status	N/A
July 2, 2012	• NCIP launch meeting • NCIP communication	N/A