Workshop Agenda

Academy NIST Workshop weblink: [http://www.acadrad.org/nistworkshop/](http://www.acadrad.org/nistworkshop/)

**Location:** National Institute of Standards and Technology Campus
100 Bureau Drive, Gaithersburg, MD 20899
Building: Administration Building 101  Room: Portrait Room

**Goal:** A need exists to develop interoperable data standards that can permit free flow and optimum utilization of medical diagnostic data. The goal for this workshop is to convene domain experts from government, industry and academia to discuss ways and means to develop and implement these standards. Expected Output, Processes and Guidelines are outlined below.

**Day 1**
**Wednesday May 16, 2018**

Of importance to note:
- Please attend the breakout sessions in the order they appear on the back of your nametag.
- Facilitators will utilize a case approach with representatives from imaging/cardiology and oncology.
- Advanced Workshop materials for review can be found here: [http://www.acadrad.org/nistworkshop/](http://www.acadrad.org/nistworkshop/)

6:00am  Breakfast available for hotel guests in the Hilton, Gaithersburg lobby restaurant
7:15am  Shuttles from Hilton to NIST – departure one
7:30am  Shuttles from Hilton to NIST – departure two
8:00am  Continental Networking Breakfast served at NIST

9:00am  **Opening Session – Portrait Room**

**Opening remarks:**
- Renee Cruea, MPA  Executive Director
- Mitch Schnall, MD, PhD  Chair, Dept. of Radiology, University of Pennsylvania
- Richard Cavanagh, PhD  Director of Special Programs, NIST
- Sara Brenner, MD, MPH  Senior Policy Advisor, White House Office of Science and Technology Policy
- Bram Stolk, PhD, MBA  VP and GM, Global Research Organization, GE Healthcare

10:00am  **Breakout session begins - Rooms A, B, & D**
*attend the sessions in the order/room listed on your nametag
*there is no room C, the 3 sessions are described as A,B,D

11:45am  **Networking lunch – Heritage Room and West Square Room**

1:00pm  **Breakout sessions begins - Rooms A, B, & D**
*attend the sessions in the order/room listed on your nametag

2:30pm  **15 minute break - Heritage Room**
2:45pm Breakout sessions begins - Rooms A, B, & D
*attend the sessions in the order/room listed on your nametag

4:15pm 15 minute coffee & snack break – Heritage Room

4:30pm Closing Summary Discussion – Portrait Room

5:00pm Shuttles from NIST to Hilton/Gaithersburg – departure one

5:15pm Shuttles from NIST to Hilton/Gaithersburg – departure two

5:45pm Networking Reception Hilton/Gaithersburg: Montgomery Ballroom
Heavy hors d'oeuvres, beer & wine will be served

**Breakout A in Conference room A**
Facilitators:
Mitchell Schnall, MD, PhD, FACR, Chairman of Radiology, University of Pennsylvania
Rich Mather, PhD, President, Canon Medical Research USA

Focus: Define the scope of the product. Concisely define the current and future state of diagnostics. Utilizing the IWGMI report, this breakout will focus on two session topics:
- What data do we have? (the state of the current data ecosystem)
- What can we do with what we have now? (identify a case/candidate cases where we have a chance in the immediate future to gather together the data needed to add value through an integrated diagnostic approach)

**Breakout B in conference room B**
Facilitators:
Jacob (Bram) Stolk, PhD, MBA, VP and Manager Global Research, GE Healthcare
Les R. Folio, DO, MPH, MSc (Rad), MAS, Director, Clinical Image Processing Service, NIH
Mark Bronkalla, MBA, Senior Offering Manager, IBM Watson Health Imaging

Focus: The movement from qualitative to quantitative findings and the need for standardized references. How data should be collected/redistributed & interoperability. Three session topics:
- What data do we want in order to extend our approach to other problems?
- How do we get that data so that its usable? (interoperability/standardization of data acquisition and handling; defining the precompetitive space)
- How do we make certain (test) that the data is usable? (what is the role of standard digital phantoms with additional synthetic data in validation; does this need elucidating or is performance a good enough benchmark to promote adoption?)

**Breakout D in conference room D**
Facilitators:
Elizabeth A. Krupinski, PhD, FSIIM, FSPIE, FATA, FAIMBE, Professor and Vice Chair of Research, Emory University
Vasken Dilsizian, MD Chief Division Nuclear Medicine, University of Maryland
Eliot Siegel, MD, Associate Vice Chair University of Maryland

Focus: Environmental factors, billing/patient/workflow/diagnostician perspective.
• What environment for community innovation do we wish to build? (data, software, integration, training, testing, interfacing).
• Practical impact, consider the end user, not just the usability of the data.
• Interoperability of data in the care path.

Day 2
Thursday, May 17, 2018

6:00am Breakfast available for hotel guests in the Hilton, Gaithersburg Lobby restaurant, check-out
7:00am Shuttles from Hilton to NIST – departure one
7:15am Shuttles from Hilton to NIST – departure two
7:30am Continental Breakfast served at NIST

8:30am Welcome & Open – Portrait Room

10:45am AM Break Heritage Room

Moderator: Elizabeth Krupinski, PhD, FSIIM, FSPIE, FATA, FAIMBE, Prof. & VC of Research, Emory University

Facilitators will present summaries of each breakout session and lead an open plenary discussion forum.

Noon Closing

Expected Output

Processes:
• A list of recommendations, ways and means to develop interoperable data standards that can optimize the use of medical diagnostic data from multiple sources. The list of recommendations would outline a path forward in a summary. The recommendations and summary would be disseminated to all stakeholders via publications.
• A commitment from government, industry and academia to continue collaboration in this space.

Guidelines:
• A preliminary list of guidelines for a standardized data management framework will be created, to enable the development of uniform inputs/outputs for diagnostic AI/ML paradigms.
• These guidelines will be crafted through the discussions with experts from areas such as imaging, cardiology, pathology, and oncology.

Noon Shuttles from NIST to Hilton/Gaithersburg – departure one
12:15pm Shuttles from NIST to Hilton/Gaithersburg – departure two
Program Committee:

Denis Bergeron, PhD  NIST  denis.bergeron@nist.gov
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Steven Seltzer, MD  CIBR Chair  sseltzer@bwh.harvard.edu
Jacob (Bram) Stolk, PhD, MBA  GE Healthcare  jacob.stolk@ge.com

Breakout sessions by alphabetical order of attendee:

Please attend the breakout sessions in order as they appear after your name. All attendees have been divided to ensure that each session is diverse and well balanced.

Andriole  Katherine  PhD  MGH & BWH Center for Clinical Data Science  B/D/A
Antani  Sameer  PhD  National Institutes of Health  D/A/B
Arnold  Corey  PhD  UCLA  D/A/B
Bello  Jacqueline  MD, FACP  American Society for Neuroradiology  D/A/B
Bergeron  Denis  PhD  National Institute of Standards and Technology  A/B/D
Brenner  Sara  MD, MPH  White House Office of Science Tech. Policy  B/D/A
Blackwell  Megan  PhD  Lincoln Laboratory  D/A/B
Bronkalla  Mark  MBA  IBM Watson Health Imaging  facilitator
Brown  Michael  MBA  GE Healthcare  D/A/B
Cappelletti  Casey  Academy for Radiology & Biomedical Imaging  A/B/D
Carey  Cheryl  MBA, CAE  Soc. for Imaging Informatics in Medicine  A/B/D
Carlos  Ruth  MD  University of Michigan  B/D/A
Cavanagh  Richard  PhD  National Institute of Standards and Technology  D/A/B
Cruea  Renee  MPA  Academy for Radiology & Biomedical Imaging  D/A/B
Dasey  Timothy  PhD  MIT Lincoln Laboratory  D/A/B
Day  Zara  Cavarocchi-Ruscio-Dennis  University of Pennsylvania  A/B/D
Dennis  Lyle  Cavarocchi-Ruscio-Dennis  B/D/A
Dennis  Matt  Cavarocchi-Ruscio-Dennis  D/A/B
Digby  Ward  PhD  Siemens-Healthineers  B/D/A
Dilsizian  Vasken  MD  Society Nuclear Med & Molecular Imaging  facilitator
Dixon  George  Allscripts  A/B/D
Farahani  Kevyan  PhD  National Institutes of Health/NCI  A/B/D
Feldman  Michael  MD, PhD  University of Pennsylvania  A/B/D
Filippi  Christopher  MD  Lenox Hill Hospital  A/B/D
Folio  Les  DO, MPH  National Institutes of Health  facilitator
Foos  David  Carestream  D/A/B
Garra  Brian  MD  FDA/AIUM  A/B/D
Garris  Michael  National Institute of Standards and Technology  A/B/D
Gill  Amanjit  MD  Cleveland Clinic  A/B/D
Gropler  Robert  MD  Washington U School of Medicine  D/A/B
Haller  John  PhD  Canon Medical Research USA, Inc.  D/A/B
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