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**Academy Leadership Research Roundtable**

**Tuesday, April 30, 2019**

**8:00 AM – 12 PM**

**Hall of States, Washington DC**

**Executive Committee:**

Ronald L. Arenson, MD  
Ruth C. Carlos, MD, MS  
Reed A. Omary, MD, MS  
Vijay Rao, MD  
Neil Rofsky, MD, MHA, FACR  
Steven E. Seltzer, MD  
Pamela Woodard, MD  
Carolyn C. Meltzer, MD  
(*ex officio*)

**Attendees: See attendee list on page 4**

Academy Staff

Renee L. Cruea, Executive Director  
Martha Nolan, Senior Director of Government & Strategic Affairs  
Allison Rafti, Senior Director of Communications & Member Strategy  
Casey Cappelletti, Assistant Director of Policy & Communications  
Lyle Dennis, CRD/ Communications Consultant

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Elizabeth Morris, MD  
Erik Paulson, MD  
Rebecca Rakow-Penner, MD PhD  
James G. Pipe, PhD  
Bram Stolk, PhD, MBA  
Max Wintermark, MD

Honored Guests

Representative Kim Schrier  
Democrat, Washington State

**1. Welcome**

The meeting began at 8 AM. Renee Cruea welcomed those in attendance, presided over introductions and recognized guests. Attendees at the table introduced themselves.

**2. Academy update on the Diagnostic Cockpit Initiative (DxCP)**

Dr. Schnall, Chair of the DxCP task force, presented an overview of the DxCP mission, purpose and current status of the efforts.

The following individuals serve on the Academy's DxCP Initiative:

Mitch Schnall, MD, PhD	University of Pennsylvania
Sara Brenner, MD, MPH	SUNY Polytechnic Institute
Janet F. Eary, MD	National Institute of Health/NCI/DCTD
Krishna Kandarpa, MD, PhD	NIBIB
Elizabeth Krupinski, PhD	Emory University
Rich Mather, PhD	Cannon Medical Research, USA
Etta Pisano, MD	American College of Radiology
Steven Seltzer, MD	Brigham and Women's Hospital
Bram Stolk, PhD, MBA	GE Healthcare
Brian Zimmerman, PhD	National Institute of Standards and Technology

**Executive Director:**

Renée L. Cruea, MPA

Dr. Steven Seltzer illustrated the history, starting with the Academy's successful efforts to legislatively establish the Interagency Working Group on Medical Imaging (IWGMI) within the White House. This

working group then published the *Roadmap for Medical Imaging Research*, which was the catalyst for creating the DxCP initiative led by the Academy as way to continue to create initiatives stemming from the IWGMI report. The purpose and goals of this initiative are to facilitate through collaboration the following:

- Establishing best practices of what industry, academics and government are doing today and how this collaboration can improve moving forward.
- Auditing our own community to identify current efforts and initiatives taking place to avoid duplication and share activity. The Academy will create a central webpage to house information such as: society logos, points of contact, details about the initiatives they're working on to enable anyone to search for (and easily find) this information.

The audience added the following points and concerns:

- EHR vendors will be critical in data integration and need to be brought to the table early.
- It is important for the group to understand where the data is coming from and how many different systems must aggregate to get the data. This could cause an issue in the number of data streams and the way data is coded.
  - Dr. Schnall addressed this by stating that he envisions the task force starting with smaller data streams and building that up over time.
- How will this AI tool prevent biases and disparities? It will be important to ensure that biases are accounted for or reflected properly in the clinical guidance.
- Is there a way to incentivize the collection approach? There should be a way to promote infrastructure and incentivize data sharing to build the most robust tool.
  - Dr. Schnall address this by stating that it will be important to advocate and convene, but we want to advocate that resources go towards research to fill any gaps created.
- How can this work be done at scale? NIH initiatives focused on putting sources together to aggregate data may be a solution.
- Would a pubmed type of search (similar to what NIH has) to search all publicly available databases be helpful?
  - Dr. Schnall made it clear that standards need to be set before a search tool like this could be compiled. The standards needed (with input from the audience) include:
    - Terminology
    - Agreement on data structure
      - If data standards can't be met, or to alleviate issues with existing data, labeling the data scheme upfront is essential. Defining the schema in the beginning will be helpful in allowing researchers to work with it.
    - Incentives for making data standard
      - Existing NIH policy states that data sharing must occur for grants over a certain funding threshold.
    - Preventing data from being used for other purposes
- How can innovation be enabled in a commercial sense while still respecting data integrity? Data will need to be available from small and large companies and to all players involved.

Academy Action Items from this discussion:

- A data values statement needs to be created.
- The task force should consider putting forward a request for funding from the government to create registers, datasets, and/or rules to govern the use of data.
- The group collectively needs a policy statement or legislative language about data usage.

**3. Congresswoman Kim Schrier (D-WA)**, A Freshman Member and the only female physician in the House made remarks.

**4 & 5. Data Ownership and Data Access AI/ML, ethics and compliance issues between academia and industry. How can knowledge between academia and industry be shared compliantly and within legal restrictions?**

Dr. Melltzer introduced Dr. Tessa Cook from the University of Pennsylvania as an expert on this topic, who presented remarks to open the discussion on this topic.

- It is hard to generate "good" data for free. We need robust data that reflects more than one patient population.

- Patients are concerned about changes in privacy policies, data breaches, who financially gains from their data and how can they track where their data is being used.
- In looking at data ownership, only one state (NH) has ruled that patients own their data. All other states note that patients only have rights (privacy, access, security) to their data. About 20 states have state-level statements that hospitals or physicians own the patient records/data, the remainder of the states have no statement on who owns the medical record.
- More important than data ownership is determining who is managing and protecting the data.

The audience added the following points and concerns:

- It is important to think about the implementation of data sharing and what happens if one loses control of patient data. If additional identification can be made from data, how can that data be shared with industry partners without releasing the data to them? ACR has started working on similar in an AI lab program.
- AI is needed to extract data from patient records. Since this is a public good advancing human health, Government should be involved.
- A JACR article has already been published explaining how industry and academia can ethically share data.
- There is a distinction between data collected for development versus data collected to prove the effectiveness of products. We do not want patients to feel like they're donating data that will require them to pay for a product they helped develop in the future. This brings up two important distinctions:
  - How do we ethically share data and prevent data breaches in the premarket phase?
  - How do we share data to prove real-world use cases?
- The statements created by this group need to be created for very specific external audiences with a focus on what is most important to each of those groups. The audiences need to include: Government agency staff, patients, and legislators.
  - Patient statement needs to focus on the value of their data and why integrating data is valuable to current patients and future patients as it will advance medicine.

Academy Action Items from this discussion:

- Seek volunteers from those attending this roundtable to form a task force on data sharing for the following purpose:
  - Create and reinforce the statements
    - Patient-centered statement (priorities for this statement are outlined above)
    - Government agency staff
    - Legislator statement
  - Create a Data Sharing 1.0 document (doesn't need to be perfect or comprehensive)
  - Create a Data Sharing 2.0 document (move scope beyond radiology)
  - Determining potential funding mechanisms needed to standardize data on a large scale
- The task force should consider putting forward a request for funding from the government to create registers, datasets, and rules to govern the use of data. Funding will be required to develop datasets. A mechanism to sharing the data may also be part of this funding request.
- The group collectively needs a policy statement or legislative language about data usage.
- Create a uniform statement on ethics, rights and values of data sharing.
- Is a journal article needed or a larger statement for the entire radiology sector on data sharing?
- Determine the use-cases that radiology and pathology need to collaborate on. Are there other groups that can collaborate on determining use-cases?
- Determine if lawyers (to protect patients, academia and industry) and economists (to determine the ROI on this work and overall value of data sharing) need to be involved in this work.
- Should this work be tied into DxCP?
- Use CIBR to find patient use-cases that should be addressed in this work and raise the voice of patients.

Dr. Ross McKinney, Chief Scientific Advisor at the AAMC presented on ethics

- Institutions need to determine their own levels of risk and risk profiles.
- Does data need to be repurchased every time it's needed for a new project?
- Industry, researchers and physicians need to collaborate to ensure user needs are being met with technologies. Are there lessons to be learned from the media or movie collaborations about perpetual licenses to view or "own" items that can be applied to datasets?

- Economic models need to be created for buying data.

Patient advocate, Kristine Zakarison remarked that patients will be willing to have their information used, including in datasets, if they understood how it was contributing to the common good. It may be less about signing-off on using the data for patients than it is about patients understanding how their data will be used and why it is being used. This information will hopefully make patients feel as though they are partners in the work.

## 6. 2019 Patient Video presented

## 7. Meeting adjourned

### Attendee List:

Name	Title	Institution/Organization
Erin Angel, PhD	Medical Affairs Leader, CT	Canon Medical Research USA, Inc.
Lisa Baird	Executive Director	World Molecular Imaging Society
Jay Baker, MD	President	Society of Breast Imaging
Mike Benol	Sales	Agfa Healthcare
Denis E. Bergeron, PhD	Research Chemist	National Institute of Standards and Technology
Sara Brenner, MD, MPH	Senior Policy Advisor	White House Office of Science and Technology Policy
Cheryl Carey, MBA	Executive Director	Society for Imaging Informatics in Medicine
Tessa Cook, MD, PhD	Assistant Professor of Radiology	University of Pennsylvania
Ruth Carlos, MD	Professor of Radiology, Division of Abdominal Rad.	University of Michigan
Bonnie Clarke	Director, Research & Discovery	SNMMI
Renee Cruea, MPA	Executive Director	The Academy for Radiology & Biomedical Imaging Res.
Kristen DeStigter, MD	Chair, Department of Radiology	University of Vermont, Larner College of Medicine
Yasmeen Fields, CAE	Executive Director	Society of Breast Imaging

Les Folio, DO, MPH	Staff Clinician, Lead Radiologist, CT	National Institutes of Health
Wesley D. Gilson, PhD	Department of Corporate Technology	Siemens Healthineers
John Haller, PhD	Clinical Research Program Manager	Canon Medical Research USA, Inc.
John D. Hazle, PhD	Chair, Department of Imaging Physics	MD Anderson Cancer Center
Joseph Hutter, MD, MA	CDR, US Public Health Service	Centers for Medicare and Medicaid Services
Krishna Kandarpa, MD, PhD	Director, Research Sciences & Strategic Directions	NIH/NIBIB
Brad Keller, PhD	Director of Clinical Research	Hologic
Angela Keyser	Executive Director	American Association of Physicists in Medicine
Shayna Knazik	Programs Manager, Science Council Liaison	American Association of Physicists in Medicine
Rich Mather, PhD	President	Canon Medical Research USA, Inc.
Ross McKinney, Jr. MD	Chief Scientific Officer	American Association of Medical Colleges
Mahadevappa Mahesh, PhD	Chief Physicist, Johns Hopkins	American Association of Physicists in Medicine
Carolyn Meltzer, MD	Chair, Department of Radiology	Emory University
Larry Nadel, PhD	Electronics Engineer	National Institute of Standards in Technology
Mary Pearson	Global Clinical Support Specialist	FujiFilm
Homer Pien, PhD	Senior VP & Chief Science Officer	Philips
Etta Pisano, MD	Chief Research Officer	American College of Radiology
Lenny Reznik, MBA	Vice President of Marketing	Agfa Healthcare

Neil Rofsky, MD	Chair, Department of Radiology	University of Texas Southwestern
Mitchell Schnall, MD, PhD	Chair, Department of Radiology	University of Pennsylvania
Steven Seltzer, MD	Chair Emeritus	Brigham & Women's Hospital
William Shaw	Executive Director	Martinos Center for Biomedical Imaging
Bram Stolk, PhD	VP, General Manager of Global Research Operations	GE Healthcare
Cindy Wang, PhD	Senior Scientist	Philips
Pamela Woodard, MD	Professor of Radiology & Biomedical Imaging	Washington University, St. Louis
Brad Wood, MD	Director, Center for Interventional Oncology	National Institutes of Health
Wei Yang, MD	Chair, Department of Diagnostic Radiology	MD Anderson Cancer Center

