

QIBA SPECT Biomarker Committee (BC)

Friday, October 16, 2015, 9 AM (CT)

Call Summary

In attendance:

Yuni Dewaraja, PhD (Co-Chair)

John Seibyl, MD (Co-Chair)

John Dickson, PhD

Albert Guvenis, PhD

Hidehiro Iida, DSc, PhD

Edward Jackson, PhD

Paul Kinahan, PhD, FIEEE

Gregory Klein, PhD

Robert Miyaoka, PhD

Nancy Obuchowski, PhD

Amy Perkins, PhD

Eric Perlman, MD

Pierre Tervé, MS

Benjamin Tsui, PhD

Brian Zimmerman, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Moderator: Dr. Dewaraja

- **I – 123 (Brain) Preliminary Scheduling for Rotating Task Forces:**

- Weekly calls every Tuesdays, at 2 pm CT for the next 4-to-6 months.
- If a task force cannot meet, they will meet the following month in order to maintain a regular schedule
- Ongoing work can continue among members via email
- Some groups were combined due to the distribution of participants

- **Task Force Groups with leadership proposed in the following order:**

1. Image Acquisition and Image Processing for DaTscan – *Dr. Dewaraja*
2. Quantitative and Image Analysis – *Drs. Miyaoka and Seibyl*
3. Phantoms/ DRO Group – *Drs. Dickson and Zimmerman*
4. Clinical/ Literature Review – *Dr. Seibyl*

- **Suggested 2015 schedule beginning in November:**

November

- Nov 3: No call (Dr. Dewaraja at IAEA meeting in Vienna)
- Nov 10: Quantitative and Image Analysis – *Drs. Miyaoka and Seibyl*
- Nov 17: Phantoms/ DRO Group – *Drs. Dickson and Zimmerman*
- Nov 24: Clinical/ Literature Review – *Dr. Seibyl*

December

- Dec 1: No call (RSNA 2015)
- Dec 8: Image Acquisition and Image Processing for DaTscan – *Dr. Dewaraja*
- Dec 15: Quantitative and Image Analysis – *Drs. Miyaoka and Seibyl*
- Dec 22: Phantoms/ DRO Group – *Drs. Dickson and Zimmerman*
- Dec 29: No call (RSNA Winter Break)

- **Image Processing**

- Technical overview of DaTscan image acquisition and image reconstruction was provided regarding the following topics:
 - image acquisition recommended measurement parameters
 - iterative reconstruction
 - scatter correction
 - post-filtering
 - attenuation correction
 - resolution recovery

- **Phantom Overview** (Drs. Dickson and Zimmerman)

- Two types of physical phantom are available for groundwork studies
 - RSD Striatal phantoms – this was recommended as it is anthropomorphic. But, fragile.
 - Liqui-Phil head phantoms – too simplistic
- Requirements for a digital phantom (normal and abnormal subjects)

- Effects due to penetration by high energy I-123 emissions difficult to mimic in a digital phantom

Upcoming Nuclear Medicine Calls (Fridays, 9 am CT):

- **Oct 23:** Nuclear Medicine Combined Biomarker Committees Meeting
- **Oct 30:** Optional call for poster developers, if needed

RSNA Staff attempt to identify and capture all committee members participating on WebEx calls. However, if multiple callers join simultaneously or call in without logging on to the WebEx, identification is not possible. Call participants are welcome to contact RSNA staff at QIBA@RSNA.org if their attendance is not reflected on the call summaries. [QIBA wiki](#)