Quantitative Imaging Network Annual Meeting May 21-22, 2019

NCI Shady Grove Campus

9609 Medical Center Drive, Rockville, MD 20892

Tuesday May 21 7:45Poster & Tools Demonstration set-up 9:00 Welcome Janet Eary, MD, Associate Director DCTD, NCI 9:05Challenges and Roadmap for QIN Robert Nordstrom, PhD, QIN Director, NCI Session 1: Clinical Utility of QIN Tools Chair: Janet Eary, MD, NCI 9:10 Quantitative Imaging Endpoints in Clinical Trials Daniel Sullivan, MD, Duke University The QIN Perspective: Moving QI Tools and Methods into Clinical Trials and Clinical 9:40 Practice David Mankoff, MD, University of Pennsylvania Chair, QIN Executive Committee 10:00 A. QIN Tools Demonstrations & Discussion (by invitation only) Clinical Consulting Committee will observe the demonstration of selected QIN tools and discuss their readiness and pathway for clinical trials **Clinical Consulting Committee** Janet Dancey, MD, FRCPS Queen's University Walter Curran MD, FACR Emory University Daniel Sullivan, MD, Duke University Michael Knopp MD, PhD Ohio State University Larissa Korde, MD, Cancer Therapy Evaluation Program, NCI Charles Kunos, MD PhD Cancer Therapy Evaluation Program, NCI Anthony Shields, MD, PhD Wayne State University Edward Jackson, PhD University of Wisconsin Susan Chang, MD University of California at San Francisco

B. Working Group Breakouts

- PET/CT (2nd floor W914)
- MRI (2nd Floor W912)
- Bioinformatics and Data Sharing (BIDS) (2nd floor W032/034)
- Clinical Trial Design and Development (2nd floor W910)
- C. Poster Session (TE 110)

Session 2A: Clinical Consulting Committee Retreat

11:30 Clinical Consulting Committee Meeting (Executive Board Room, 2E914) to discuss the transition of QIN tools into clinical trials. Later a suammry report will be presented to the assembled QIN members.

Session 2B: Review of Co-Clinical Trial Meeting from May 20

Chair: Huiming Zhang, Ph.D.

- 11:30 Co-clinical Imaging Research Resources Program Huiming Zhang, PhD, NCI
- 11:42 Washington University Co-Clinical Imaging Research Resource Kooresh Shoghi, PhD, Washington University
- 11:54 The Duke Preclinical Research Resources for Quantitative Imaging Biomarkers Cristian Badea, PhD, Duke University
- 12:06 Vanderbilt University "PREDICT" Charles Manning, PhD, Vanderbilt University
- 12:18 Penn Quantitative MRI Resource for Pancreatic Cancer Rong Zhou, PhD, University of Pennsylvania
- 12:30 Lunch

Session 3: Young Scientist Award

Chair: Robert Nordstrom, Ph.D., NCI

1:30 Larry Clarke Young Investigator Award: Brain Imaging Collaboration Suite (BrICS) Saumya Gurbani, Emory University

Session 4: Commercialization Pathways

- Chair: Greg Evans, PhD, Small Business Innovation Research (SBIR) Development Center, NCI
- 2:00 Federal Funding for Start-up Companies Deepa Narayanan, M.S., SBIR Development Center, NCI
- 2:30 Small Business Panel Discussion

Session 5: QIBA – QIN Interactions

- Chair: Robert Nordstrom, PhD
- 3:00 Quantitative Imaging Biomarker Alliance (QIBA) Areas of Interaction with QIN Ed Jackson, PhD, University of Wisconsin and QIBA

- 3:30 Panel Discussion: QIN/QIBA QIN/QIBA participants
- 4:00 Break

Session 6: Report from Clinical Evaluators

- Chair: Gary Kelloff, MD
- 4:15 A presentation from the Clinical Consulting Committee on QIN tools translation
- 4:45 Closing Remarks Robert Nordstrom, PhD
- 5:00 End Day One

Wednesday, May 22

8:00 Administrative Announcements - Robert J. Nordstrom, Ph.D.

Session 7: QIN - NCTN Tool Developer Discussion

Chair: Gary Kelloff, MD

8:15 Follow-up to the Clinical Consulting Committee session Discussion and feedback on Clinical Consulting Committee presentation. Strategy planning on next-steps for QIN tool translation. Questions & comments will be distributed ahead

- Alliance: Larry Schwartz, MD, Columbia University
- ECOG-ACRIN: David Mankoff, MD, PhD, U Penn
- NRG: John Buatti, MD, University of Iowa
- IROC Mike Knopp, MD, PhD, Ohio State University

9:30 Break & Posters

Session 8: Data Science, Pipelines & Radiomics

Chair: Keyvan Farahani, PhD, NCI

- 10:00 Radiomics Pipeline Demonstration & Discussion Sandy Napel, PhD, Stanford University and Ashish Sharma, PhD, Emory University
- 11:00 PET-CT Feature Ontology Collaborative Project TBA
- 11:20 MRI Radiomics CCP Amita Dave, PhD, MSKCC
- 11:40 QIN Benchmarks, Challengers, and Collaborative Projects update K. Farahani, PhD, NCI

12:00 Lunch

Session 9: Associate Member Presentation Chair: Pushpa Tandon, PhD, NCI

- 1:00 Getting SI traceability of MRI-biomarker measurements Stephen Russek, PhD NIST
- 1:15 Imaging Workflows and Normal Data for Standard Functional Scintigraphic Imaging Procedures in Mice Winfried Brenner and Nicola Beindorff Dept of Nuclear Medicine and Berlin Experimental Radionuclide Imaging Center Universitaetsmedizin Berlin, Germany

Session 10: Working Group Reports

Chair: Robert Nordstrom, PhD

1:30 Brief Working Group presentations

- PET/CT
- MRI
- BIDS
- CTDD

Session 11: Planning and Business Meeting

Chair: Robert Nordstrom, PhD

2:30 NCI Strategies for QIN Future Robert J. Nordstrom, PhD and Janet Eary, MD

Business Meeting

- Announcement of new WG Chairs
- Schedule of important meetings
- 3:00 Adjourn