



Summary of the MAQC November-17-2005 Teleconference

The MAQC Project: Calibrated RNA Samples, Reference Datasets, and QC Metrics/Thresholds for Microarray Quality Control

Teleconference Date: November 17, 2005 (9 am PST/11 am CST/12 pm EST/17:00 GMT)
Summary Date: November 21, 2005
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MAQC Website: <http://edkb.fda.gov/MAQC/>

- 1. Update on Data Access (Leming Shi):** An e-mail message on the confidentiality conditions for accessing and analyzing the MAQC datasets was sent to 38 organizations (27 test sites, 10 data analysis sites, and Stratagene) on Oct-24-2005. As of Nov-16-2005, 22 organizations have agreed to the “conditions” and have been given instructions for downloading the datasets. Twenty-one of the 22 organizations (including 8 of the 10 analysis sites and 9 of the 10 platform providers) called Leming Shi to obtain the password.
- 2. Initial Data Analysis and General Conclusions/Concerns:** Rick Jensen and a few others raised concerns about the EPP and NCI datasets and encouraged both platform providers to take a closer look at their datasets. Leming Shi explained that the normalized EPP data should be considered as “log ratios” in which one of the replicates from sample A was used as the reference. The value of keeping the datasets in the study has been emphasized.
- 3. Agilent’s One-color Data Generation/Submission (Jim Collins):** The three test sites are expected to submit one-color data to FDA/NCTR by Nov-23-2005. Pilot Titration data (45 arrays) will also be submitted according to the same timeline. Jim Collins stated Agilent’s desire of treating the one-color data as its primary dataset for the MAQC study so that the experimental design would be exactly the same as other one-color platforms and the data analysis would be greatly simplified. The MAQC group agreed to Agilent’s request and was happy to see data on samples C and D in the one-color design. FDA/NCTR will distribute the one-color data to analysis sites as soon as possible. Official data analysis sites agreed to analyze the one-color data before the December face-to-face meeting. The one-color data will be named as the “*AGI*” platform.
- 4. TeleChem ArrayIt (Leming Shi):** TeleChem ArrayIt has been planning to generate data following the MAQC guidance with its H25K Human Genome Microarrays (<http://arrayit.com/Products/Microarrays/H25K/h25k.html>). RNA samples A and B were purchased from Stratagene and Ambion, respectively, and mixed at TeleChem ArrayIt to produce mixtures C and D. RNA samples are being distributed to three test sites. Dr. Mark Schena has been invited to give a brief presentation at the face-to-face meeting when the MAQC group will decide if the H25K arrays should be included in the main study as an additional platform.
- 5. December Meeting Agenda (Leming Shi):**
 - The tentative Agenda was reviewed. Everyone was invited to make suggestions.
 - It has been emphasized that the results to be presented at the meeting should be considered preliminary and for the purpose of stimulating discussions regarding future directions of data analyses.
 - Ninety people have registered for the MAQC meeting as of Nov-16-2005.
 - Speakers: Provide a brief title of your presentation if you have not done so.
 - Chairs/panelists: Contact Leming if you are not available for the scheduled time.

- Registered participants: Contact Leming if you changed your mind.
 - If you or your colleagues have not yet registered but plan to attend the meeting, you should contact Leming.Shi@fda.hhs.gov to secure your space at the meeting.
 - Conference call will be set up and the entire meeting (presentations and discussion sessions) will be recorded. However, concerns were raised regarding the potential disruption by teleconference calls.
 - PPT slides: Concerns were raised to concurrently display PowerPoint slides at Affymetrix's Microarray Bulletin website. The main concerns were the preliminary nature of the results to be presented and the appearance of bias to have the slides displayed at a website run by one of the major participating platform providers. It was decided not to make PPT slides viewable from the Affymetrix Microarray Bulletin website. However, speakers agreed to provide slides to teleconference participants from the FDA headquarters.
 - Participants are welcome to distribute materials (*e.g.*, reprints, PPT slides) related to the theme of the MAQC meeting.
6. **Promoting the MAQC Effort** (Leming Shi, Rick Jensen, Damir Herman, and Jean Thierry-Mieg)
- A panel discussion about the MAQC project at the CHI Quantitative PCR meeting, San Diego, CA has been scheduled on March 20, 2006. Panelists: Shawn Baker, Kathy Lee, Yuling Luo, Leming Shi, Jim Willey, and Paul Wolber. Leming Shi explained that they represented three alternative platform providers (Kathy, Yuling, and Jim), Shawn (located in San Diego), and Paul (is scheduled to give a presentation prior to the panel discussion).
 - Affymetrix Microarray Bulletin will post a news item about the MAQC project based on a telephone interview with Rick Jensen and Leming Shi. News items by other organizations are welcome and will be accommodated.
 - Jean Thierry-Mieg (NCBI) briefly mentioned the MAQC project in his presentation at "*Transcriptome 2005: From Functional Genomics to Systems Biology*", Nov 8, 2005, Shanghai, China.
 - Damir Herman (NCBI) was asked to give a presentation at a microarray user group at the NIH on December 8, 2005 to present the general aspects of the MAQC project and the sequence-mapping work that Damir has been doing.

Location of the MAQC December Meeting:

The meeting will be held on December 1-2, 2005 at the **Cyprus Room**, Crowne Plaza Cabana, 4290 El Camino Real, Palo Alto, CA 94306. Telephone: 650-857-0787; FAX: 650-496-1939; Website: <http://www.cppaloalto.crowneplaza.com/>. Please note the change of meeting venue.

Registration:

Registration is free but required. Contact Leming Shi, National Center for Toxicological Research, US FDA, 3900 NCTR Road, Jefferson, AR 72079. Tel: 870-543-7387; leming.shi@fda.hhs.gov.