

## Meeting Report

SBS Data & Image Analysis Special Interest Group meeting

April 9, 2008

Chair: Kurt Scudder, Accelrys, Inc.

Meeting Co-Chairs: Mark Collins, ThermoFisher, Inc.

Susanne Heynen-Genel, Burnham Institute for Medical Research

Attendance at this year's meeting was around 40. The meeting focused, once again, on the effort to establish standards for data interchange in HCS. While little activity had taken place since the last meeting, a new development may reinvigorate this effort. This new development grew from a chance encounter at a regional cytometry meeting in which Kurt Scudder, Mark Collins, Ryan Brinkman and Jim Wood of ISAC, and others overcame some barriers to progress on the standards effort.

Kurt Scudder made a brief presentation on this new development. ISAC has obtained NIH funding to continue its standards-making efforts in cytometry, and is expanding this effort to encompass imaging cytometry. They are seeking input from practitioners in the field. This strong experience in standards-making and need for input on imaging standards dovetails nicely with the DIA SIG's vast wealth of experience in cellular imaging but relative lack of experience in standards-making. The DIA SIG will revive the effort to construct a committee comprised of a cross-section of HCS practitioners, hardware and software vendors, and other interested parties, with the twin goals of supporting ISAC's efforts to construct a data standard for imaging cytometry and insuring that the standard meets the needs of our industry. The ISAC leadership has given initial support to this effort, and the DIA SIG will get buy-in from the SBS to support this effort.

Kurt Scudder then presented a review of the ISAC draft requirements document for a data standard for cytometry and analytical cytology, provided by Ryan Brinkman of ISAC. This is a non-technical document which simply sets out what requirements such a standard should meet. Some of the elements will present no problems from an imaging standpoint, while others may require significant work. Interested parties are encouraged to download the draft requirement document from the DIA SIG website, and submit comment to Ryan Brinkman (email address included in the document).

Mark Collins presented the Cellomics/ThermoFisher approach to standardizing the data interchange in HCS, which is currently being used internally. ThermoFisher is offering this as a starting point for a standard, but Mark stressed that nothing in their current implementation is "bolted down" and it is meant to be a guideline for standards development, not a standard. Mark again promised to provide a

written version of their current model for inspection and comment. It will be posted on the DIA SIG website as soon as Mark provides it.

Finally, ideas were solicited for topics for next year's meeting. It was decided to limit the standards effort to just a short report next year. Other suggested topics:

- How to best leverage multiparameter data (suggested by Mark Collins)
- QA "best practices" for image-based assays
- Assay challenges from academic labs and screening centers (suggested by Mike Brasch)

Anyone who is interested in presenting on one of these topics is encouraged to consider this – please contact Kurt Scudder ([kscudder@accelrys.com](mailto:kscudder@accelrys.com)) or Ilya Ravkin ([ilya@ravkin.net](mailto:ilya@ravkin.net)) if you are interested in presenting at next year's meeting. Also, if you have ideas for other topics, please suggest them.

Presentations from this year's meeting can be found on the DIA SIG's website (follow the link from the SBS website SIG pages).