Flow Informatics and Computational Cytometry Society (FICCS)

Development Conference Call Summary

Attendees:

BCCRC:	Ryan Brinkman, Josef Spidlen, Settimo Szliske
BD:	John Dunne
UT Southwestern:	Richard Scheuermann, Jamie Lee, Yu (Max) Qian, Jennifer Cai, Megan Kong
FCCC:	Olga Tchuvatkina, Elizabeth Goralczyk
UM:	Peter Wilkinson

November 22nd, 2006, 10:30am PST

Summary:

Agenda outline was approved as proposed by Ryan

- Specify FuGE extension milestones (success criteria for +90 days)
- Review FuGE action items from last call
- Review Flow Cytometry Query Use Cases from Jamie Lee

Ryan informed that http://www.ficcs.org/ is basically up with just minor details to be fine tuned.

1. **Action Item**: Ryan will circulate within the flowcyt-devel list useful standardization manuscripts from the latest issue of Nature Biotechnology.

Richard informed about Special Populations

2. **Action Item**: Everyone should get members from broad community involved, i.e., educate first and see who is interested to participate.

Richard discussed the ImmPort data model that is parallel to FuGE now (as it had to be implemented earlier that FuGE was about to finish). However, the two models use similar approach and it should not be too difficult to undertake a planned migrate in the future.

Peter informed that he also needs an object model (to be used for LIMS implementation) sooner than later and he prefers to start from FuGE over starting his proprietary project.

Extending FuGE – 90 days milestones:

- **Settimo**: Gating parts by the end of the year
- **Josef** and **Peter**: Data transformation parts (includes compensation)
- **Richard's group:** Biological sample / preparation, and related details
- **Peter**: Audit support (QC/QA protocols)
- **Olga/Elizabeth:** Compare FuGE closely to MIFACE/MIAFE

Peter was agreed to be the official contact approaching FuGE developers in name of our group. Technically related questions may still be asked by all members of the group individually.

Olga/Elizabeth vs. Josef/Peter justifications were briefly discussed.

3. **Action Item**: Josef will encode both the approaches in XML, which may help with further justification.
4. **Action Item**: Olga/Elizabeth tries to encode both the approaches on a database level. This may be a little bit long term goal as there are technical difficulties to generate the ER schema right now. (Only the ER of the previous FuGE M2 is available now).

By the end of December we should agree the list of data transformation "terms" that should go into OBI.

5. **Action Item:** Ryan's group will prepare this; Max (UT Southwestern) provides his input.

The purpose of "Minimal information" models/guidelines was discussed. It seems to be important to store the minimal information to **interpret/compare** experiments. We do not necessary have to be able to **reproduce** them. (This approach is different from original MIAME approach).

Richard pointed out the need of some fixed structure; to be able to query, to specify what kind of information goes into what tools, etc. We should specify a set of recommended information with a standardized way to describe it. A subset of it should be the required set of minimal information.

Peter pointed out the need of a validation plan / tool to be able to decide whether an experiment includes the required information or not.

Jack pointed out the end-user point of view to all of the "standards"; designing the user interfaces to convince users to provide necessary information will be an nontrivial task that we have to prepared for.

The "matrix storage" formats were reviewed. Ryan also discussed Adam Treister's opinion that the binary format is more efficient compared to any ASCII based format. FCS4 proposal seems to be the best solution.

6. **Action Item**: Ryan's group will provide an open source converter between FCS4 and a human readable ASCII encoded CSV format (usable in Notepad, MS Excel, and many other applications)

Jack pointed out the need of external validation to all our milestones / efforts; target audience should be specified (broad community is essential). NIML and BISC may be a good start.

Megan pointed out the usefulness of feed back through web sites.

7. **Action Item**: Ryan's group will investigate possibilities of implementing a wiki page as part of the new ficcs.org web site.