Brief Bio and (PR)²: Problems & Pitches – Rants & Raves by Adam West

About me
After formal training in Computer Science, Adam started at Lilly 16 years ago developing what was at that time the largest data warehouse at Lilly, tasked with monitoring the prescribing habits of physicians across the United States. Since joining Lilly Discovery IT, Adam has lead many efforts in large data – from consolidating public sequencing data, annotating expression array chips, the integration and visualization of clinical drug metabolizing enzymes and transporters, and most recently solving next generation sequencing's "big data" needs. He currently is an Advisor, leading the Informatics Capabilities team that provides systems for open innovation, proteomics, imaging, competitive intelligence, tailored therapeutics and numerous informatics systems enabling early discovery research.

Publications and Talks
- Dow E.R.; et al, Gene Ontology Term Enrichment from Microarray Studies Using a Hyperbolic Viewer Facilitates Comparison Between Experiment Groups, International Conference Intelligent Systems for Molecular Biology (ISMB), 2005

Questions
1. What are your main interests in attending the workshop?
   - Understanding wider attempts at the problem space of large-scale scientific data integration.
   - See how far various efforts have matured over the years.
   - Make connections with like-minded researchers and problem solvers.

2. What ideas, methods and tools would you like to share at the workshop?
   - General comments on NGS data needs and issues from a pharma perspective.

3. What do you think are the biggest opportunities or unmet needs in any of: translational medicine, drug discovery, semantic technologies, data visualization, or healthcare information? (feel free to pick those with which you have the most interest/experience)
   - Seems clear that the integration of heterogeneous data is the moose on the table, but efficient and meaningful (research context) integration is illusive. It appears semantic approaches are mired in minutia.
• Light weight (HTML5/d3), versatile visualizations to allow for interface exploration are needed for the scientific domain.
• Biological understanding of orthologous genomics in important model organisms.

4. What are the biggest roadblocks to realizing these opportunities?
• The appreciation and consumption of big science/long tail data – one-off, limited use data sets integrated with long-term, steady data sets (from my chair, both internal and external).

5. In which of the main areas of emphasis of the workshop (semantics, translational medicine, drug discovery, big data, semantic technologies, visualization and networks) do you work?
• All but semantics (only indirectly in that space).

6. What are the biggest challenges in your work currently?
• Limited funding and resources.
• Insufficient time to consume

7. What are the main sources of funding for your work? How difficult do you consider it to get funding in your area, and why?
• NA

8. What would you like to learn and achieve at the workshop?
• Renewed vigor and perspective.
• Updated ideas and suggested tactics on the latest innovations in this space.