NSF Workshop: “Identifying the Research Challenges Underlying a National-scale Learning Health System”

Final Workshop Agenda

Thursday, April 11

Plenary sessions will be in the West End Salon A.

7:45-8:30 Informal collation over breakfast

8:30-9:00 Introductory Session
  - Welcome
  - Goals of the workshop
  - Participant and staff introductions
  - NSF welcome and perspective (Howard Wactlar)

9:00-9:45 Introductory Remarks by Carolyn Clancy

9:45-10:00 Break

10:00-Noon Opening Panel and Discussion (plenary session)

Objective: To establish the LHS concept, the goals of the workshop, the interdisciplinary character of the workshop, and the process to be followed
- The LHS: visions of the present and future (Charles Friedman)
- A computational/informational science and engineering perspective (Kevin Sullivan)
- A behavioral science/economics perspective (Lynn Etheredge)
- Briefing on the workshop plan (Charles Friedman)

Noon-1:00 Lunch

1:00-5:00 Activities Focused on Four Advanced LHS Use Cases

Objective: To identify the research challenges that must be addressed to realize a very high-functioning LHS capable of executing the requirements expressed as use cases addressing four domains:

Use Case 1: Health care quality
(Facilitator: William Stead)

Use Case 2: Public health
(Facilitator: Richard Platt)
Use Case 3: Personal health  
(Facilitator: Milton Corn)  
Use Case 4: Research  
(Facilitator: Mark Musen)

Process: Participants will work in four pre-assigned, intentionally heterogeneous multi-disciplinary groups. Each group will work on one of the four use cases. Participants will generate the research challenges that must be addressed in order to execute the requirements of their assigned use case.

1:00-1:15 Review of the Use Case

1:15-3:15 Each group is asked to identify the research challenges underlying the requirements of their assigned case

3:15-3:30 Break

3:30-4:30 Plenary session to present each group’s identified challenges to participants from the other groups

4:30-5:30 Original groups reconvene to refine research challenges in light of comments and suggestions from other participants

6:30- Reception and Dinner

Friday, April 12

7:45-8:30 Breakfast and Informal Discussion

8:30-8:45 Review of Yesterday and Plan for the Day

8:45-Noon Session to Focus on the Research Challenges Underlying the “System-Level” Requirements of the LHS

Objective: To identify a set of research challenges complementing those identified on Thursday, by focusing on four broad system-level requirements for the high-functioning LHS.

1. Trusted and valued by the public  
   (Facilitator: Carl Gunter)

2. Economically sustainable  
   (Facilitator: Melinda Buntin)

3. Stable, certifiable, adaptable, and self-improving  
   (Facilitator: Douglas Van Houweling)

4. Capable of generating valid knowledge
(Facilitator: Jeffrey Brown)

**Process:** Participants will be divided into four pre-assigned groups. Each group will be assigned to address one of the broad system-level requirements. In contrast to Thursday’s groups, these groups will be relatively homogenous, to concentrate relevant expertise on each requirement area.

8:45–10:15   Groups identify research challenges underlying the assigned system-level requirements

10:15-10:30   Break

10:30-11:30   Sharing of the challenges identified by each group, in plenary session

11:30-12:15   Groups caucus to revise research challenges based on comments and suggestions received in plenary session

12:15-1:15    Lunch

1:15-2:30     Panel Discussion to Reflect on the Identified Research Challenges

**Panelists:**
Deborah Estrin
William Rouse
William Stead
Douglas Van Houweling

2:30-3:00     Closing Session: Plans for post-workshop refinement of the research challenges and report writing