

S4: Distributed Computing, TranSMART, & Big Data

Session Summary

The use of i2b2 in developing distributed computing and specialized i2b2 Hives. This is the direction that that the i2b2 team is working towards with tranSMART in order to increase its support for special i2b2 instances that support Genomics, Imaging science, and Big Data Analytics that can be linked together in a distributed network.

Presenters (6)



Paul Avillach,
MD, PhD

Assistant Professor of
Pediatrics

Children's Hospital
Boston

Assistant Professor of
Biomedical
Informatics

Harvard Medical
School

Assistant Professor in
the Department of
Epidemiology

Harvard School of
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Christopher
Herrick, MBA

Corporate Manager II

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Mike Mendis

Corporate Team
Lead II

Partners HealthCare



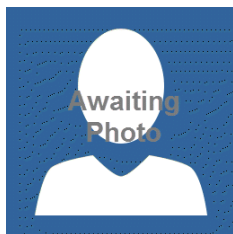
Shawn Murphy,
MD, PhD

Corporate Director,
Research IS and
Computing

Partners HealthCare

Associate Professor
of Neurology

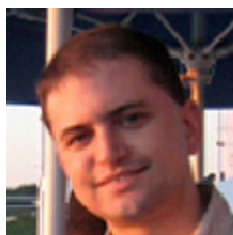
Harvard Medical
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Lori Phillips, MS

Sr. Project Specialist

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Griffin Weber,
MD, PhD

Research Associate
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Harvard Medical
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Associate Professor
of Medicine

Beth Israel
Deaconess Medical
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Presentations (4)

Presentation 1: i2b2 / tranSMART BD2K PIC-SURE RESTful API

Presenter: Paul Avillach



Presentation 2: Healthcare System Dynamics

Presenter: Griffin Weber, MD, PhD

- HSD Cycles in Clinical Data
- Using HSD to Predict Outcomes
- Using HSD to Derive Normal Ranges
- Adding HSD to i2b2



Presentation 3: Using Big Data to Create an Information Commons with the i2b2 Infrastructure

Presenter(s): Christopher Herrick and Lori Phillips

- Information Commons
- i2b2 Cell: The Canonical Software Module
- Distributed Queries: Central and Remote Hives



Presentation 4: Developing Specialized Hives to Contribute to the i2b2 Ecosystem

Presenters: Shawn Murphy and Mike Mendis

- Distributed Query System links together Specialized i2b2 Hives
- Using BRISKIT to assemble a new Hive very quickly
- Patient Information Commons

