Ontology Summit 2016: Framing the Conversation: Ontologies within Semantic Interoperability Ecosystems

Healthcare Track: Session 2
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Healthcare Track: **Goal and Mission**

- **Healthcare and biomedical domains:** a very large ecosystem of vocabularies and ontologies
- **Goal:** To provide insight into the nature of semantic interoperability issues and approaches in the Healthcare & Biomedical ecosystem
  - Health Level Seven (HL7): http://www.hl7.org/
  - Open Biological and Biomedical Ontologies (OBO): http://www.obofoundry.org/
  - National Center for Biomedical Ontology (NCBO) BioPortal: http://bioportal.bioontology.org/
  - Logical Observation Identifiers Names and Codes (LOINC): https://loinc.org/
  - RxNorm (normalized names for clinical drugs): https://www.nlm.nih.gov/research/umls/rxnorm/
  - SOLOR (normalized terminology model of SNOMED, LOINC, RxNorm): US Veterans Health Administration (VHA)
  - Federal Health Information Model (FHIM): http://www.fhims.org/content/420A62FD03B6_root.html
  - Fast Health Interoperability Resources (FHIR): https://www.hl7.org/fhir/
- **Mission:** Present issues of semantic interoperability and integration in domain of healthcare: Example: Semantic Electronic Health Record (EHR) and Systems
Healthcare Track: Today’s Speakers

• Keith Campbell (US Veterans Health Administration (VHA) Knowledge-Based Systems, USA):
  – SOLOR: Building a coherent foundation for clinical data by leveraging the SNOMED/LOINC Cooperative Agreement, and integrating RxNorm

• Barry Smith (U-Buffalo, NY, National Center for Ontological Research, USA):
  – An Ontology Ecosystem Approach to Electronic Health Record Interoperability

• Amit Sheth (Kno.e.sis, Wright State University, USA):
  – Ontology-enabled Healthcare Applications exploiting Physical-Cyber-Social Big Data

• Leo Obrst (MITRE, USA)
  – Semantic Interoperability in General and in Healthcare: Clinical Care