

# NCI Center for Bioinformatics Informatics Seminar Series

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## Application of XML and Semantic Web Technologies in Medical Research and Data Analysis

9:00 until 12:00 Noon  
July 23, 2001

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6116 Executive Blvd., Conference Room 3056B

**Jonathan A. Borden, M.D.**  
**Director Boston Gamma Knife Center**  
**Assistant Professor of Neurosurgery**  
**Tufts University**  
**New England Medical Center**  
**Boston, MA**

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Dr. Borden will present an overview of XML applications in healthcare. The use of widely available XML tools allows rapid application development of Web enabled healthcare systems. The development of XML document storage, query and retrieval systems allows analysis of distributed document repositories. The Semantic Web, including RDF, RDDL and DAML bring research in new knowledge representation techniques to the Internet. Development and application of these techniques for healthcare applications will be discussed. An overview of the DAML ontology and knowledge representation language will be given. Particular attention will be given to the application of these new Semantic Web technologies to cancer research.

Dr. Borden is a neurooncologic surgeon. He has been intimately involved in XML and Semantic Web activities as editor of the RDDL specification and chair of the ASTM E31 Electronic Medical Records Subcommittee. He is involved with the W3C Semantic Web/RDF activity with a particular interest in healthcare ontologies and applications.