



**Department of Mathematics, Statistics and Computer Science
St. Francis Xavier University
Presents**

*A Personalized Access Control Framework for Workflow-based
Healthcare Information*

by

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Wednesday, February 17th, 2010 @ 2:15 in Ax23A

Access control is one of the key features of any healthcare system. This problem is becoming increasingly complex as health care is distributed over many care settings. Most security models for clinical information systems are merely variations of Role-Based Access Control (RBAC) which bases access decisions on the role of the user rather than with patient consent. As a patient is the owner of his/her medical information, there is a move to letting the patient decide who has access to their information. In this talk, we outline how personalized access control can be enforced in a healthcare system so that the patient can control the revelation of their medical data. Data can be accessed by a caregiver only when the personal policy permits access to that caregiver. Depending on specific information associated with a task in a workflow, i.e., the context, in which the access is being executed, different personal policies can be applied. Personal policy also includes rules for updating the access information. In the implementation of our system, it is planned that policies will be defined by the policy language *ponder2*. The workflows will be modeled in YAWL and stored as an XML file. The roles of users will be associated with the workflows. The Policy interpreter will process the current access request with respect to the workflow context, hospital policy and patient policy and then produce the access decision. A mechanism to handle delegation will be included.

Refreshments will be served before the talk in AX24A