

**THE DEPARTMENT OF COMPUTER SCIENCE & THE COMPUTER SCIENCE GRADUATE
STUDENT ORGANIZATION (GSOCS) PRESENT**

INVITED SPEAKER SERIES

co-sponsored with GSO and partially paid for by student activity fees

**Professor Beth Plale
Indiana University Bloomington**

Friday, December 7 at 12 noon, room EB 110

Capsule Computing: Safe Open Science

Abstract: Open science is prompting active efforts to make data from research available for broader use. But making data open is complicated by important protections on the data (e.g., protections of privacy and intellectual property). The spectrum between shared everything (open access) and shared nothing has been limited to the release of partial or obscured data. This position paper puts forth another solution on the spectrum: Capsule framework, a socio-technical framework consisting of policies, human processes, and technologies to enable controlled access and use of restricted data. Using experience gathered through implementing one such framework for computational, analytical access to a massive collection of copyrighted texts, we illustrate the synergies and tradeoffs that exist between what could be implemented in software versus implemented through policy and process in striking the right balance between safety, ease of use, and efficiency.

Bio: Beth A. Plale is a rotator and program officer at the National Science Foundation who is working on policy issues in open science. She is a Full Professor in the Dept. of Intelligent Systems Engineering at Indiana University Bloomington who has authored over 150 peer-reviewed publications. She is founding Director of both the Data To Insight Center and the HathiTrust Research Center, and past Director of Science of Indiana University's Pervasive Technology Institute.

Dr. Plale's research interests are in data management, cloud computing, Big Data, and open science.

Dr. Plale's postdoctoral studies were done at Georgia Institute of Technology. Her PhD is from the Watson School of Engineering, Dept of Computer Science, at Binghamton University. She is one of the two US-based, founding members of the Research Data Alliance (RDA), and served as inaugural chair of the RDA Technical Advisory Board (TAB). She received the Early Career award from the Department of Energy (DOE).