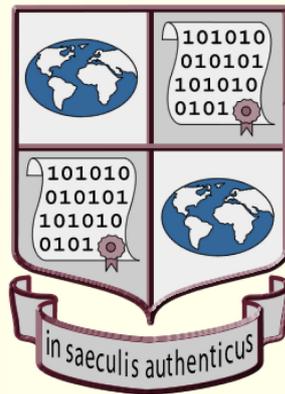


# InterPARES Project

International Research on Permanent Authentic Records in Electronic Systems



**It is All About Trust**

**The Reliability, Accuracy and Authenticity of Digital Records**



**InterPARES Project**

Luciana Duranti

Project Director

# InterPARES Project Goal

To develop the body of theory and methods necessary to ensure that digital records produced in databases and office systems as well as in dynamic, experiential and interactive systems in the course of artistic, scientific and e-government activities can be created in accurate and reliable form and maintained and preserved in authentic form, both in the long and the short term, for the use of those who created them and of society at large, regardless of technology obsolescence and media fragility.



# Object of Inquiry: Records

Records are the means for carrying out our activities and their residue.

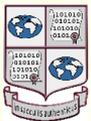
We create and maintain them in order to act, to refer to them, and to provide evidence of our actions and endeavours.

We preserve them over the long term for reasons of administrative and historical accountability to the next generations, and as sources for research of any kind, for cultural, business and personal purposes.



# Qualities We Want to Protect

- **Reliability**: the trustworthiness of a record as a statement of fact. A reliable record is complete and generated according to a controlled procedure
- **Accuracy**: the exactness and correctness of a record content, dependent on the competence of the author and the controls on the process by which data are recorded and transmitted through space (i.e., between persons, systems or applications) and time (i.e., when stored off line, or when the hardware or software used to process, communicate or maintain it is upgraded or replaced)
- **Authenticity**: the trustworthiness of a record as a record. An authentic record is one that has not been tampered with or otherwise corrupted. Authenticity is maintained by protecting a record identity and integrity. It differs from  
**Authentication**: a means of declaring authenticity at a point in time



# The Digital Records Challenge

- They do not exist as physical entities, but are constituted of linked digital components (the “manifested” record differs from the “stored” record)
- Their original manifestation disappears after being saved: we cannot maintain or preserve digital records, but only the ability to re-produce or re-create them
- The facility of reproduction and manipulation makes it difficult to identify the final, official, reliable or accurate version
- Technological obsolescence makes digital records inaccessible in a very short time span
- Intellectual property and privacy rights are hard to protect

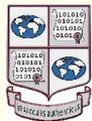


# The Digital Records Challenge (cont.)

Most systems that should contain records do not, because the entities in them **lack fixed form and stable content**.

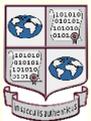
- In **dynamic systems** they depend for their content upon data extracted from a variety of other systems which may have variable instantiations.
- In **experiential systems** they are intended to incorporate the behaviour of the rendering system and the effects of subjective user's interactions.
- In **interactive systems**, each user intervention or input from another system causes a change of content and/or form.

The systems that do contain records, contain bad records, primarily because of **lack of identifiable contexts and relationships** among themselves and with records outside the system



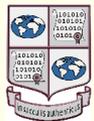
# InterPARES Principles

- Technology cannot determine the solution to the reliable and accurate creation of digital records or to their authentic preservation over the long term: **organizational needs** define the problem and **archival principles** must establish the correctness and adequacy of each technical solution
- Solutions to the digital records challenges are inherently **dynamic** and **specific** to the cultural, disciplinary, administrative and legal situations
- Preservation is a **continuous process that begins with records creation**
- We must be able to **presume records trustworthiness**, till proof to the contrary is established
- We must be able to **infer authenticity** on the basis of the circumstances of records creation, maintenance and preservation



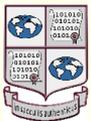
# InterPARES Research Activities

- Identification of **what constitutes a record** in each type of system and in each context, and **what record has the force of an original**, based on archival and diplomatics theory and six thousand years of record making and recordkeeping
- Definition of **what a reliable, accurate and authentic record** is in the arts, science, law and administration on the basis of analysis of literature, surveys, interviews
- Development of the requirements for the design of **a trusted record making system, a trusted recordkeeping system and a trusted record preservation system**, on the basis of 42 case studies, and the modeling and diplomatic analysis of the results
- Development of **methods and procedures for the creation, maintenance, appraisal, selection and disposition, and long-term preservation of digital records**, based on archival theory, law, and issues related to organizational culture



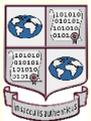
# InterPARES Final Products

- A **framework of principles guiding the development of policies** for records creating and preserving organizations
- **Guidelines for making and maintaining digital records** for individuals and small communities of practice
- **Guidelines for digital preservation** for archival institutions
- **Authenticity requirements** for records systems
- A **metadata registry** for the registration and analysis of metadata schemas
- Principles and criteria for adoption of **file formats, wrappers, and encoding**
- A **terminology database** including glossary, dictionary and ontologies



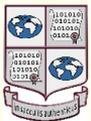
# Results Usability and Effectiveness

- Produced by more than **100 co-investigators from 25 countries** and 5 continents, including civil law and common law countries, public and private sectors, academia and the professions, creators and preservers
- **159 graduate students** to date have taken part in research and development. Among them, 109 UBC master's graduates have gone to work as records and information professionals or archivists the world-over. Two post-doctoral fellows have tenured full time positions at Windsor and UCLA. PhD graduates are forthcoming. At UBC we include findings and results in every course
- The team has produced **14 books, more than 100 refereed articles** and about 50 non-refereed, offered more than 100 lectures and workshops, given many interviews
- InterPARES has **formal partnerships** with several international research projects related to digital records
- InterPARES has submitted upon request **position papers** to commissions drafting legislation, such as the new copyright act; and several of its members belong into **standards setting bodies**, such as ISO



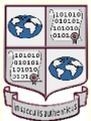
# Why the Success?

- **Multidisciplinary** and **multicultural**
- It does not break with the past, thereby **taking away the fear of the unknown**: it is based on the hypothesis that there is no record, record element or record making process we see today that we have not seen in the past six thousand years (e.g. blogs, GIS)
- It puts forward the figure of the records and information manager or archivist as the **trusted custodian**, defines its role as the neutral third party, and establishes its body of knowledge and qualifications consistently with every country's historical tradition (this is also consistent with oral traditions, entrusted to remembrancers)



# Why the Success? (cont.)

- It makes clear that, without immediate and continuing action, there will be no data, records or information we and our descendants will be able to rely upon as sources
- InterPARES ultimate purpose is to ensure that digital records and digital communication can be trusted, and **trust** is the most rare, yet, the most shared, understood and valued commodity in every civilization, and one that cannot be bought, but needs to be built, protected, nurtured, and served



# Findings and Products

All findings and products will be made available this spring on the InterPARES Web site:

[www.interpares.org](http://www.interpares.org)



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Project Director