

Keynote: Wendy Duff, Professor and Dean, Faculty of Information, University of Toronto



The Future is a Foreign Country

As an information professional and academic, Dean Wendy Duff has witnessed firsthand the impact of disruption on the information professions. She and her colleagues are all too aware they are preparing their students for a very different future – "a foreign country" in effect. The Faculty has been steadily shifting its curriculum to provide students with the digital skills and knowledge they will need to cope with and take advantage of both known unknowns and the more elusive unknown unknowns. With more and stronger disruption of libraries, archives, and museums on the horizon, the Faculty has recently introduced new concentrations in human-centred data science and user experience design. It also has a newly funded chair in Artificial Intelligence and the Human.

Wendy Duff is a professor and Dean in the Faculty of Information at the University of Toronto. Her research and publications focus on archival access, archival users, and evaluation of archives. During her tenure as Dean, the Faculty has introduced a new Bachelor of Information degree and new Master of Information concentrations in Human-Centred Data Science and User Experience Design.

Panelist: Mike Smit, Associate Professor, School of Information Management, Dalhousie University



Visual Sharing, Artificial Intelligence Algorithms, and Society: Implications for Memory Institutions

Humans are inherently visual creatures, but for millennia text has been the primary way of communicating in society, largely due to the time, expense, and inconvenience of sharing images widely compared to doing so with text. This is changing, as modern tools make individual self-expression via text or images affordable and ubiquitous. Recognizing that a lot of what is shared is mere noise, this is still a potentially rich source of material to help us understand culture and society. I will provide a brief overview of how AI can help us sift through this content, but will also issue dire warnings to memory institutions about the role of algorithms in modern society.

Dr. Mike Smit is an award-winning professor in Dalhousie University's School of Information Management where he studies the intersection of people, information, and technology. He draws on his background in computer science to explore how we can best leverage data and emerging technology to benefit people, organizations, and society, while also mitigating risks these technologies pose.

Panelists: Marie-Jean Meurs, Professor and Hugo Cyr, Dean, Faculty of Political Science and Law, Université du Québec à Montréal



Artificial Intelligence and Social Inequalities

We will examine how AI can enhance or reduce inequalities between citizens, between industry players, and, globally, between nations and diverse national cultures. We will then discuss a number of public policies with the potential to reduce the risk of increasing inequalities.

Marie-Jean Meurs, Ph.D., is a professor in the Department of Computer Science of the Faculty of Science at Université du Québec à Montréal (UQAM). Her research focuses on artificial intelligence and, specifically, machine learning to process natural language and big data analytics. She is a specialist in feelings analysis applied to health, and a founding member of the LegallIA research group on legaltech and HumanIA, a social science and humanistic research group on artificial intelligence, which she coordinates.



Hugo Cyr, LL.B., B.C.L. (McGill), LL.M. (Yale), LL.D. (U. de Montréal), Dean of the Faculty of Political Science and Law at Université du Québec à Montréal and a lawyer. He is the director of the Fédéralisme de coopération, asymétrie et solidarité strand of the Centre d'analyse politique: Constitution et Fédéralisme (CAP-CF), one of the founders and a member of LegallIA, a research group on legaltech, and HumanIA, a social sciences and humanistic research group on artificial intelligence. He was a Boulton Fellow at McGill University, a law clerk to the Honourable Ian C. Binnie of the Supreme Court of Canada, a guest researcher at the European Academy of Legal Theory, a guest professor at McGill University, and a Schell Fellow at the Yale Law School.

Panelist: André Vellino, Associate Professor, University of Ottawa



"I don't know why I did that!" – Trusting Decisions by Big Data Machines

As we grow accustomed to systems that mine our internet usage data and accurately predict what we are looking for and who to connect with on social media platforms, not much thought has been given to providing users with explanations for how these decisions are made. Deep Learning algorithms that mimic the human brain's ability to identify patterns exhibit super-human abilities of identifying knowledge from data-stores that are "too big (for a human) to know." Acquiescing to the increasingly pervasive use of explanation-free data-driven machine-decisions – be they embedded in mass-social media or in relatively smaller scale collections-management systems for museums and archives – we are at risk of developing a blind trust that these systems are bias-free. Until they have been designed to provide us with reasons for their decisions, we should not (fully) trust them.

André Vellino is an Associate Professor in Information Studies at the University of Ottawa and an Adjunct Research Professor at the Institute of Cognitive Science at Carleton University. He spent six years conducting research in recommender systems for digital libraries at the Canada Institute for Scientific and Technical Information at the NRC. Another fourteen years of his career was dedicated to advancing constraint logic programming technology for Nortel and to applying text mining technology to the analysis and classification of email at Entrust. His research interests include the automatic inference of metadata schemas for scientific research datasets and automated reasoning about data in general.

Panelist: Guylaine Beaudry, University Librarian, Concordia University



Digital Strategy as a Foundation for Disruption

The digital constitutes more than just digital tools, digital storage, and processing of data and information. It changes our organizations, how we communicate and how we think. The Library can play a key role in leading this transformation toward the digital realities that affect higher education and on the kind of digital environment that best supports the rapidly changing experiences, needs, and aspirations of students, faculty, and staff.

Guylaine Beaudry is Vice-Provost Digital Strategy and University Librarian at Concordia University (Montréal). Since 2017, she has been leading the university-wide digital strategy.

Panelist: Jonathan Bengtson, University Librarian, University of Victoria



Digital Humanities as a Foundation for Disruption

This presentation will explore the convergence of interests of digital humanities scholars and university libraries, and how disruptive technologies in digital humanities have implications for our approaches to the creation, dissemination, and preservation of knowledge.

Jonathan Bengtson is the University Librarian at the University of Victoria. He is currently the Vice-President/President-elect of the Canadian Association of Research Libraries, and Founder and Editor-in-Chief of KULA: knowledge creation, dissemination, and preservation studies.

Panelist: Martha Whitehead, University Librarian, Queen's University



Data as a Foundation for Disruption

This presentation will discuss the principles and expertise that university libraries bring to the management of all sorts of data – from digitized collections to born digital research data – and the need to treat data as a foundational building block for the disruptive technologies emerging across the university.

Martha Whitehead is Vice-Provost (Digital Planning) and University Librarian at Queen's University, where she has led the development of the university's digital planning framework. She is currently chair of the National Heritage Digitization Strategy Steering Committee and was instrumental in the formation of Portage, a national research data management network launched by the Canadian Association of Research Libraries in collaboration with other research stakeholders.

Presenter: Sandra Toze, Assistant Professor, School of Information Management, Dalhousie University



Transforming Government – Assessing Training Needs to Build Digital Capacity

This fall, Dalhousie University's Schools of Public Administration (SPA) and Information Management (SIM), in the Faculty of Management (FOM) collaborated with the Canadian Digital Services (CDS) to better understand how the shift to digital is changing the core skills and competencies required of government employees to design and deliver services. This project has involved the development of a training needs analysis survey, which was administered across the government, consultations with senior leaders as well as an environmental scan of existing digital learning best practices and training programs. This presentation will focus on initial and emerging outcomes from this research.

Dr. Sandra Toze is an Assistant Professor and the Director of the School of Information Management. Her research is centred around three evolving and interconnected interdisciplinary strands: 1) the collaborative information and data processes of groups; 2) the shift to digital governance; and 3) user specific, social, and mobile information interactions. Prior to her academic career, Sandra worked as an Information Professional in the financial and information services industries.

Panelist: Sylvain Bélanger, Director General, Digital Operations and Preservation, Library and Archives Canada



LAC Digital Optimization of Canada's Collections

Library and Archives Canada has acquired, and is implementing a digital asset management system to address its digital management gaps, from ingest through to digital preservation, while also addressing the digital business optimisation necessities for a modern national library and archives. The journey through these various activities will be shared with participants.

Sylvain Bélanger has been Director General of the Digital Operations and Preservation Branch for Library and Archives Canada since February 2014. In this role Sylvain is responsible for leading and supporting LAC's digital business operations, and all aspects of preservation for digital and analog collections. Prior to accepting this role, Sylvain had been Director of the Holdings Management Division since 2010, and previously Corporate Secretary and Chief of Staff for Library and Archives Canada. Sylvain is Treasurer of the International Internet Preservation Consortium, a member of the CARL Digital Preservation Working Group, and IFLA's Standing Committee and Conservation and Preservation, among other roles.

Panelist: Umar Qasim, Digital Preservation Officer, University of Alberta



Portage's Approach to Preserve Canadian Research Data

The Portage's Preservation Expert Group (PEG) is working to identify the challenges that need to be addressed to develop and improve RDM capacity and infrastructure across Canada, especially as it relates to the long-term preservation of research data. PEG is planning to create and implement a framework within which digital preservation can be defined, discussed, and achieved in the Canadian context. In addition, PEG aims to share guiding principles that reflect the values and commitments of organizations and communities already involved in this work.

Dr. Umar Qasim holds a PhD in Information Systems. He has over 20 years of experience in the field of information technology. Since 2012, he has been working as the Digital Preservation Officer at the University of Alberta Libraries with responsibility for its digital preservation program. He is also involved in many collaborative initiatives and shares his expertise with the professional community of practice at large. He is the current chair of Portage's Preservation Expert Group.

Panelist: Steve Marks, Digital Preservation Librarian, University of Toronto



Project Canopus and the "Third Wave" of Digital Repositories - Developments in Digital Preservation at the University of Toronto

The University of Toronto has spent the last year developing new digital preservation processes, and a new digital asset management system, named Canopus. In this talk, we will discuss what we've been working on and how we got there: unpacking our changing requirements, our view of preservation trends, and how our overall strategic thinking affected technology choices for the project.

Steve Marks is the Digital Preservation Librarian at the University of Toronto. His day-to-day job is to ensure the library has planning and technical infrastructure in place to safely preserve the university's digital stuff – including licensed resources, archival and special collections, data, and whatever else we decide we want to keep. His main research interests are design of information systems, preservation planning and policy, futzing around with obsolete media types, and the preservation of video games.