

Timothy W. Cole

MATHEMATICS LIBRARY, 216 ALTGELD HALL (MC-382)

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

1409 W. GREEN STREET, URBANA, IL 61801 USA

VOICE: +1 (217) 244-7837, EMAIL: T-COLE3@ILLINOIS.EDU

WEB: <https://experts.illinois.edu/en/persons/timothy-w-cole>

EXPERIENCE

Faculty Appointments (*University of Illinois at Urbana-Champaign*):

- 2018 to date** Elaine & Allen Avner Professor in Interdisciplinary Research
- 2009 to date** Affiliate Professor, School of Information Science
- 2003 to date** Professor, University Library
- 1996 - 2003** Associate Professor, University Library
- 1990 - 1996** Assistant Professor, University Library

Professional Positions:

University of Illinois at Urbana-Champaign:

- 2015 to date** CIRSS Coordinator for Library Applications (15%)
- 2012 – 2014** Digital Content Access Librarian (50%)
- 2007 – 2008** Interim Head, Library Digital Services & Development (50%)
- 2000 to date** Mathematics Librarian
- 1999 – 2000** Assistant Engineering Librarian for Information Services
- 1994 – 1999** Systems Librarian for Digital Projects
- 1990 – 1994** Assistant Engineering & Beckman Institute Librarian
- 1989 – 1990** Visiting Assistant Engineering & Beckman Institute Librarian

Jet Propulsion Laboratory, California Institute of Technology, Pasadena:

- 1985 – 1988** Technical Group Leader

Martin Marietta Aerospace, NASA Michoud Assembly Facility, New Orleans:

- 1978 – 1985** Engineer, Associate Engineer, Group Engineer, Senior Engineer

Classes Taught (*University of Illinois at Urbana-Champaign*):

- LIS 450 DS (1 unit):** Implementation of Distributed Information Systems.
(Fall 1997; Spring 1999, 2000 & 2001).
- LIS 590 MD/MDL (1 unit):** Metadata in Theory and Practice.
(Spring 2006, 2007 & 2008; Fall 2009).
- LIS 562 A/LE (4 GR Hours):** Metadata in Theory and Practice
(Fall 2013; Spring 2014).

EDUCATION

- M.S.: Library and Information Science, 1989,
University of Illinois at Urbana-Champaign
- B.S.: Aeronautical and Astronautical Engineering, 1978,
University of Illinois at Urbana-Champaign

PROFESSIONAL SERVICE (SELECTED)

University:

- Member, Library Executive Committee, 1997 – 2001, 2005 – 2009, 2013 – 2015
2000 – 2001, Vice-Chair, Library Executive Committee & Library Faculty
- Chair, Research Misconduct Investigation Panel (appointed by VCR), 2013
- Member, Library Promotion & Tenure Advisory Comm., 2000 – 2002, 2004 – 2008
2005 - 2006, Chair
- Member, Library Collection Development Committee, 2002 – 2005, 2015 –
- Member, Library Information Technology Committee, 1999 - 2002
1999 - 2001, Chair
- Member, Campus Computing and Networking Committee, 1996 – 1997
- Member, Interfaces Committee, Illinois Library Computer System Office, 1993 – 1996

Public / Disciplinary:

- World Wide Web Consortium (W3C):
W3C Advisory Committee Representative (representing UIUC), 2014 –
Member, W3C Publishing Working Group, 2017 –
Member, W3C Digital Publishing Interest Group, 2014 – 2017
Member, W3C Web Annotation Working Group, 2014 – 2017
co-chair, 2016 – 2017
Founding Member, W3C Open Annotation Community Group, 2011 –
- HathiTrust Digital Library:
Member, Zephyr Advisory Group, 2015 – 2017
Member, Metadata Policy, Strategy, Use and Sharing Advisory Group, 2015 –
co-chair, 2016 –
- Member, International Mathematical Union, Committee on Electronic Information and
Communication, 2013 –
- Member, National Research Council Study Committee for Planning a Global Library of the
Mathematical Sciences, 2012-14. Report published by National Academies Press.

Member, Program Committee, Joint Conference on Digital Libraries, 2013 - 2014, 2018
Program Committee Co-Chair, 2013.

Member, Program Committee, Theory and Practice of Digital Libraries, 2013 - 2014

Referee, *International Journal of Digital Libraries* (2005), *Journal of Digital Information* (2005), ASIST National Conference (2006 & 2007), *ACM Transactions on Knowledge Discovery from Data* (2006), *Journal of Education in Library and Information Science* (2012).

Field Reviewer, National Science Foundation, 2005, 2006, 2007

Member, DLF-Aquifer Technology Architecture Working Group, 2005 – 2009

Co-Chair, Program Planning Committee for *NSF/NSDL Scientific Markup Languages Workshop*, held Arlington, VA, 14-15 June 2004

Member, Proposal Review Panel, joint National Science Foundation / Library of Congress Digital Archiving and Preservation Research grant program, 2004

Member, Editorial Board, *Library Hi Tech*, 2002 –
guest editor, *Library Hi Tech* Special issue on IMLS NLG (2004)
guest editor, *Library Hi Tech* Special issue on OAI-PMH (2003)

National Science, Technology, Engineering, and Mathematics Education Digital Library:
Chair, NSDL Technology Standing Committee, 2003 – 2004

Member, Research and Demonstration Proposal Review Panel, Institute of Museum and Library Services, National Leadership Grant Program, 2002, 2003, & 2004

Invited Participant, Digital Mathematics Library Planning Grant (NSF DUE Award # 0206640, PI Sarah Thomas, Cornell University), 2002 – 2003

Open Archives Initiative:

Member, OAI-ORE Liaison Group, 2006 – 2008

Member, OAI-PMH Technical Committee, 2001 – 2002

Member, Institute of Museum and Library Services, Digital Library Forum, 2001 – 2002

Society & Association Memberships:

Member, American Library Association 1992 – 2008, 2014 – present:

1994 -1995 Chair, LITA Human-Machine Interface Interest Group

1993 -1994 Vice-Chair, LITA Human-Machine Interface Interest Group

Member, The Renaissance Society of America 2017 –

Member, Association for Computing Machinery (ACM), 2012- 2016

Member, Society for Emblem Studies, 2011 – 2014

Member, American Society for Information Science, 1997 – 2008

Member, Beta Phi Mu — Library Science Honor Society, 1990 –

GRANTS (SELECTED)

Workset Creation for Scholarly Analysis and Data Capsules (WCSA+DC), a HathiTrust Research Center project. PI: J. Stephen Downie. Co-PIs: Timothy W. Cole and Beth Plale (Indiana University). Sponsor: Andrew W. Mellon Foundation. Award: \$1,169,894. (2016 – 2018).

Exploring the Benefits for Users of Linked Open Data for Digitized Special Collections. PI: Timothy W. Cole. Co-PIs: Myung-Ja Han, Caroline Szyłowicz. Sponsor: Andrew W. Mellon Foundation. Award: \$248,000. (2015 – 2017).

Workset Creation for Scholarly Analysis: Prototyping Project, a HathiTrust Research Center project. PI: J. Stephen Downie. Co-PIs: Timothy W. Cole and Beth Plale (Indiana University). Sponsor: Andrew W. Mellon Foundation. Award: \$436,525. (2013 - 2015).

Emblematica Online II. PI: Mara Wade. Co-PIs: Timothy W. Cole, Myung-Ja Han, and Harriet Green. Sponsor: NEH Humanities Collections and Reference Resources Program (Division of Preservation and Access). Award: \$280,000. (2013 - 2015).

Open Annotation Collaboration Phase III: Adoption, Community, & Infrastructure. PI: Timothy W. Cole. Co-PIs: Jane Hunter (The University of Queensland), James Smith (University of Maryland), Herbert Van de Sompel (Los Alamos National Laboratory). Sponsor Andrew W. Mellon Foundation. Award: \$170,000. (2012 - 2013).

Open Annotation Collaboration Phase II: Demonstration and Refinement. PI: Timothy W. Cole. Co-PIs: Jane Hunter (The University of Queensland), Neil Fraistat (University of Maryland), Herbert Van de Sompel (Los Alamos National Laboratory). Sponsor Andrew W. Mellon Foundation. Award: \$674,000. (2011-2013).

Advancing the IMLS DCC to Promote our Collective Cultural Heritage. PI: Carole Palmer. Co-PIs: Timothy W. Cole, Miles Efron, Thomas Habing, Sarah Shreeves. Sponsor: Institute of Museum and Library Services. Award: \$314,157. (2010-2012).

Emblematica Online: Emblem Digitization, the German Emblem Database, and the OpenEmblem Portal. PIs: Mara Wade (U.S.); Helwig Schmidt-Glitzner (Germany). Co-PIs: Alvan Bregman, Timothy W. Cole, Thomas D. Kilton, Myung-Ja Han (U.S.); Thomas Stäcker, Andrea Opitz (Germany). Sponsor: Bilateral Digital Humanities Program funded jointly by the National Endowment for the Humanities (U.S.) and the Deutsche Forschungs Gemeinschaft (Germany). Award: ~ \$300,000 total. (2009-2011).

Open Annotation Collaboration (OAC): Enabling Interoperable Annotation of Scholarly Digital Resources. Phase I: Data Model & Interoperable Specification; AXE/Zotero Integration; Scholarly Annotation Analysis. PI: Timothy W. Cole. Co-PIs: Neil Fraistat (University of Maryland), Jane Hunter (The University of Queensland), Herbert Van de Sompel (Los Alamos National Laboratory). Sponsor Andrew W. Mellon Foundation. Award: \$362,000. (2009-2010).

Using OAI-ORE Resource Maps to Support Scholarly Annotation of Digitized Books. PI: Timothy W. Cole. Co-PIs: Michael Norman, William Parod (Northwestern University). Sponsor: Andrew W. Mellon Foundation. Award: \$23,285. (2008).

- Next Generation Digital Federations: Adding Value through Collection Evaluation, Metadata Relations, and Strategic Scaling.* PI: Carole Palmer. Co-PIs: Timothy W. Cole, William H. Mischo, Allen Renear, Sarah Shreeves, Michael Twidale. Sponsor: Institute of Museum and Library Services. Award: \$975,903. (2007-2010).
- Demonstration of Portal Mechanisms for Enhanced Resource Integration in the Academic Information Environment.* PI: William H. Mischo. Co-PIs: Timothy W. Cole, Michael Norman, Mary Schlembach. Sponsor: Institute of Museum and Library Services. Award: \$225,747. (2007-2009).
- Metadata for You and Me: A Training Program for Shareable Metadata.* PI: Sarah Shreeves. Co-PIs: Timothy W. Cole, Michael Norman, Jenn Riley (Indiana University). Sponsor: Institute of Museum and Library Services. Award: \$91,561. (2006 - 2008).
- Implementation of the OAI-PMH Metadata Provider for the SEMP Data Repository.* PI: Timothy W. Cole. Sponsor: Dept. of the Army, U.S. Army Construction Engineering Research Laboratory (CERL). Award: \$11,339 (2004 – 2005).
- MOAC Community Toolbox.* PI: Richard Rinehart, UC Berkeley Art Department and Berkeley Art Museum & Pacific Film Archive. Co-PI (UIUC): Timothy W. Cole. Sponsor: Institute of Museum and Library Services. Award (UIUC): \$27,062 (2004 – 2007).
- Pilot OAI-PMH Metadata Harvesting Service for the CIC.* PI: Timothy W. Cole. Sponsor: Committee on Institutional Cooperation (CIC). Award \$158,000 (2003 – 2006).
- IMLS Collection Registry and Metadata Repository.* PI: Timothy W. Cole. Co-PIs: William Mischo, Nuala Koetter, Nancy O'Brien, Carole Palmer, Sarah Shreeves, Michael Twidale. Sponsor: Institute of Museum and Library Services. Award: \$ 862,423 (2002 – 2007).
- Second Generation Digital Mathematics Resources with Innovative Content for Metadata Harvesting and Courseware Development.* PI: William H. Mischo. Co-PIs: Timothy W. Cole, Eric W. Weisstein, Kimberly M. Hill, Michael Trott. Sponsor National Science Foundation (NSDL – DUE #0226327). Award: \$797,000 (2002 – 2005).
- Proposal to Implement a Scholarly Information Portal Using OAI Metadata Harvesting Protocols.* PI Timothy Cole. Co-PIs: Beth Sandore, William Mischo, Christopher Prom, & Thomas Habing. Sponsor: Andrew Mellon Foundation. Award: \$183,000 (2001 – 2003).
- D-Lib Test Suite / DLI Collaborating Partners Program.* PI: William Mischo. Co-PI: Timothy W. Cole. Sponsors: Corporation for National Research Initiative, Defense Advanced Research Projects Agency, Am. Inst. of Physics, Am. Physical Society, Am. Society of Civil Engineers, Institution of Electrical Engineers (GB), Naval Research Laboratory NTT Learning Systems (Japan). Award: Approx. \$500,000 (1998 – 2001).
- Building the Interspace: Digital Library Infrastructure for a University Engineering Community.* PI: Bruce Schatz. Co-PIs: Ann Bishop, William H. Mischo, Timothy W. Cole, Joseph Hardin, and Larry Jackson. Sponsors: National Science Foundation, Advanced Research Projects Agency (DOD), National Aeronautics and Space Administration. Award: \$4 million (1994 – 1998).

HONORS AND AWARDS

- 2017 Frederick G. Kilgour Award for Research in Library and Information Technology
- 2004 Highly commended award for paper published in Library Hi Tech, Vol. 21.
- 2003 Award for Outstanding Paper published in OCLC Systems and Services, Vol 18.
- 2001 IMLS Certificate of Appreciation (for service on IMLS Digital Library Forum)
- 2001 Included on Spring 2001 University of Illinois at Urbana-Champaign Incomplete List of Teachers Ranked as Excellent
- 1991 NASA Group Achievement Award (for work done 1986-1988)
- 1990 Frances B. Jenkins Award for the Outstanding M.S. Candidate in Science Librarianship (University of Illinois)
- 1982 NASA Public Service Group Achievement Award
- 1980 NASA Manned Flight Awareness Award

PUBLICATIONS (INCLUDING PUBLISHED ABSTRACTS AND W3C PUBLICATIONS)

- Cole, Timothy W., Myung-Ja (MJ) K. Han, Christine Schwartz. 2018. *Coding with XML for Efficiencies in Cataloging and Metadata: Practical Applications of XSD, XSLT, and XQuery* (An *ALCTS Monograph*). Chicago: ALA Editions, 195 pp. ISBN: 978-0-8389-1653-7 (US). London: Facet Publishing (CILIP), 195 pp. ISBN: 978-1-78330-369-4 (UK).
- Page, Kevin R., Jacob Jett, Timothy W. Cole, Deren Kudeki, David Bainbridge, Peter Organisciak, J. Stephen Downie. 2018. "Worksets Expand the Scholarly Utility of Digital Libraries," Poster Abstract. *Proceedings of the 2018 ACM/IEEE Joint Conference on Digital Libraries* (Fort Worth, TX USA, June 3-6, 2018). DOI: [10.1145/3197026.3203886](https://doi.org/10.1145/3197026.3203886)
- Cole, Timothy W. and Ivan Herman, eds. 2018. *Web Annotation Extensions for Web Publications* (W3C First Public Working Draft). <https://www.w3.org/TR/wpub-ann/>
- Jett, Jacob, Timothy W. Cole, Alex Kinnamen, Deren Kudeki, Myung-Ja (MJ) K. Han, Caroline Szylowicz. 2017. "Extending Legacy Metadata with Linked Open Data," Project Report. *Proceedings of International Conference on Dublin Core and Metadata Applications 2017* (Washington, DC, October 26-29). Pp. 29-38. Available: <http://dcpapers.dublincore.org/pubs/article/view/3853>.
- Jett, J., Cole, T. W. and Downie, J. S. 2017. "Exploiting graph-based data to realize new functionalities for scholar-built worksets," Annual Meeting Poster Abstract. *Proceedings of the Association for Information Science and Technology*, 54 (1): 716–717. DOI: [10.1002/pr2.2017.14505401128](https://doi.org/10.1002/pr2.2017.14505401128)
- Murdock, Jamie, Jacob Jett, Tim Cole, Yu Ma, J. Stephen Downie and Beth Plale. 2017. "Towards Publishing Secure Capsule-Based Analysis," Short Paper. *Proceedings of the 2017 ACM/IEEE Joint Conference on Digital Libraries* (Toronto, ON, June 19-23). DOI: [10.1109/JCDL.2017.7991585](https://doi.org/10.1109/JCDL.2017.7991585)

- Jett, Jacob, Timothy W. Cole, Myung-Ja K. Han, Caroline Szylowicz. 2017. "Linked Open Data (LOD) for Library Special Collections," Poster Abstract. *Proceedings of the 2017 ACM/IEEE Joint Conference on Digital Libraries* (Toronto, ON, June 19-23). DOI: [10.1109/JCDL.2017.7991604](https://doi.org/10.1109/JCDL.2017.7991604)
- Cole, Timothy W., Myung-Ja K. Han, Maria Janina Sarol, Monika Biel, David Maus. 2017. "Using Linked Open Data to Enhance the Discoverability, Functionality and Impact of Emblematica Online." *Library Hi Tech* 35 (1): 159-178. DOI: [10.1108/LHT-11-2016-0126](https://doi.org/10.1108/LHT-11-2016-0126).
- Cole, Timothy W., Sarven Capadisli, Benjamin Young and Ivan Herman, eds. 2017. Embedding Web Annotations in HTML (W3C Working Group Note). Available: <https://www.w3.org/TR/annotation-html/>.
- Green, Harriett, Timothy Cole and Myung-Ja Han. 2016. "Enhancing User Access Through the Emblematica Open Emblem Portal." In *Emblems and Impact Volume I: Von Zentrum und Peripherie der Emblemantik*, eds. Ingrid Hoepel and Simon McKeown. Newcastle upon Tyne: Cambridge Scholars Publishing, 87-101. ISBN: 978-1-4438-5184-8.
- Cole, Timothy W., Myung-Ja Han and Mara R. Wade. 2016. "Linked Open Data and Semantic Web Technologies in Emblematica Online." In *Early Modern Studies after the Digital Turn*, eds. Laura Estill, Diane Jakacki, and Michael Ulliyot, *New Technologies in Medieval and Renaissance Studies* 6. Toronto and Tempe: Iter Press and Arizona Center for Medieval and Renaissance Studies, 201-236. ISBN: 978-0-86698-557-4.
- Jett, Jacob, Timothy W. Cole, David Dubin and Allen H. Renear. 2016. "Discerning the Intellectual Focus of Annotations." In *Proceedings of Balisage: The Markup Conference 2016* (Washington, DC, August 2-5). Balisage Series on Markup Technologies, vol. 17. DOI: <https://doi.org/10.4242/BalisageVol17.Jett01>.
- Jett, Jacob, Myung-Ja Han and Timothy W. Cole. 2016. "Disambiguating Descriptions: Mapping Digital Special Collections Metadata into Linked Open Data Formats" [poster abstract, 5 pp.]. In *ASIST 2016: Proceedings of the 79th ASIS&T Annual Meeting: Creating Knowledge, Enhancing Lives through Information & Technology*, Available: <https://www.asist.org/files/meetings/am16/proceedings/submissions/posters/16poster.pdf>
- Jacob Jett, Terhi Nurmikko-Fuller, Timothy W. Cole, Kevin R. Page, J. Stephen Downie. 2016. "Enhancing Scholarly Use of Digital Libraries: A Comparative Survey and Review of Bibliographic Metadata Ontologies." In *JCDL 2016, 16th ACM/IEEE-CS Joint Conference on Digital Libraries*, Newark, NJ, USA, June 19-23: 35-44. DOI: <https://doi.org/10.1145/2910896.2910903>.
- Jett, Jacob, Timothy W. Cole, Christopher Maden and J. Stephen Downie. 2016. "The HathiTrust Research Center Workset Ontology: A Descriptive Framework for Non-Consumptive Research Collections." *Journal of Open Humanities Data*. 2, p.e1. DOI: <http://doi.org/10.5334/johd.3>.
- Nurmikko-Fuller, T., Jett, J., Cole, T., Maden, C., Page, K., Downie, J. 2016. A Comparative Analysis of Bibliographic Ontologies: Implications for Digital Humanities. In *Digital Humanities 2016: Conference Abstracts*. Jagiellonian University & Pedagogical University, Kraków, pp. 639-642. Available: <http://dh2016.adho.org/abstracts/369>.

- Han, M., T. Cole, P. Lampron, M. Sarol. 2015. "Exposing Library Holdings Metadata in RDF Using schema.org Semantics." In *Proceedings of the International Conference on Dublin Core and Metadata Applications*: 41-49. Available: <http://dcpapers.dublincore.org/pubs/article/view/3772/1962>.
- Nurmikko-Fuller, Terhi, Kevin R. Page, Pip Willcox, Jacob Jett, Chris Maden, Timothy Cole, Colleen Fallaw, Megan Senseney, and J. Stephen Downie. 2015. "Building Complex Research Collections in Digital Libraries: A Survey of Ontology Implications." In *JCDL 2015, 15th ACM/IEEE-CS Joint Conference on Digital Libraries*, Knoxville, TN, USA, June 21-25: 169-172. Available: <http://dx.doi.org/10.1145/2756406.2756944>.
- Green, Harriett, Mara Wade, Timothy Cole, and Myung-Ja Han. 2015. "User Engagement with Digital Archives: A Case Study of Emblematica Online." In *Creating Sustainable Community: The Proceedings of the ACRL 2015 Conference*, edited by Dawn Mueller. Chicago, IL: Association for College and Research Libraries: 177-187. Available: http://www.ala.org/acrl/files/conferences/confsandpreconfs/2015/Green_Wade_Cole_Han.pdf
- Green, Harriett, Mara Wade, Timothy Cole, MJ Han. 2015. "User Assessment with Emblematica Online: A Case Study of Analyzing Scholarly User Engagement with Digital Humanities Research Initiatives" [poster abstract]. *Joint CSDH/SCHN Digital Humanities Conference 2015*.
- Fenlon, Katrina, Colleen Fallaw, Timothy Cole, Myung-Ja Han. 2014. A Preliminary Evaluation of HathiTrust Metadata: Assessing the Sufficiency of Legacy Records. In *Proceedings of Digital Libraries 2014*, London, United Kingdom: 317-320.
- Cole, Timothy, Michael Norman, Patricia Lampron, William Weathers, Ayla Stein, M. Janina Sarol, Myung-Ja Han. 2014. "MARC to schema.org: Providing Better Access to UIUC Library Holdings Data" [poster abstract]. *International Conference on Dublin Core and Metadata Applications, DC-2014*: 196-198.
- Wade, Mara, Timothy W. Cole and Myung-Ja Han. 2014. "Linked Open Data Technologies and Emblematica Online II" [poster abstract]. *Digital Humanities 2014*, Lausanne, Switzerland.
- Fenlon, Katrina, Timothy W. Cole, Myung-Ja Han, Craig Willis, and Colleen Mari Fallow. 2014. "Augmenting HathiTrust Metadata to Support Workset Creation for Scholarly Analysis" [poster abstract]. *Digital Humanities 2014*, Lausanne, Switzerland.
- Green, Harriet, Katrina Fenlon, Megan Senseney, Sayan Bhattacharyya, Craig Willis, Peter Organisciak, J. Stephen Downie, Tim Cole, and Beth Plale. 2014. "Using collections and worksets in large-scale corpora: Preliminary findings from the Workset Creation for Scholarly Analysis project" [poster abstract]. *iConference 2014*, Berlin, Germany.
- Downie, J.S., Cole, T., Plale, B. & Unsworth, J. 2013. Workset "Creation for Scholarly Analysis: Preliminary Research at the HathiTrust Research Center." Poster presented at *Japanese Association for Digital Humanities*. Kyoto, Japan, September 19-21, 2013.

- Cole, Timothy W., Myung-Ja Han, William Weathers, and Eric Joyner. 2013. "Library MARC Records into Linked Open Data: Challenges and Opportunities." *Journal of Library Metadata*, 13 (Issue 2-3): pp. 163-196. DOI: [10.1080/19386389.2013.826074](https://doi.org/10.1080/19386389.2013.826074)
- Downie, J. Stephen and Robert H. McDonald (General Chairs), Timothy W. Cole, Robert Sanderson, Frank Shipman (Program Chairs). 2013. *JCDL '13 13th ACM/IEEE-CS Joint Conference on Digital Libraries*. New York: ACM. ISBN: 978-1-4503-2077-1. 462 pages.
- Cole, Timothy W., Anna Gerber, Robert Sanderson and James Smith. 2013. Using Open Annotation [half-day, pre-conference workshop]. In *Digital Humanities 2013: Conference Abstracts* (ISBN: 978-1-60962-036-3). Lincoln, NE: Center for Digital Research in the Humanities, University of Nebraska-Lincoln: 11-13. Available: <http://dh2013.unl.edu/abstracts/workshops-003.html>
- Cole, Timothy W., Myung-Ja Han, Mara R. Wade, and Thomas Stäcker. 2013. Linked Open Data & the OpenEmblem Portal [short paper]. In *Digital Humanities 2013: Conference Abstracts* (ISBN: 978-1-60962-036-3). Lincoln, NE: Center for Digital Research in the Humanities, University of Nebraska-Lincoln: 146-150. Available: <http://dh2013.unl.edu/abstracts/ab-359.html>
- Cole, Timothy W. and Myung-Ja Han. 2013 *XML for Catalogers and Metadata Librarians. Third Millennium Cataloging*, Susan Lazinger and Sheila Intner (series eds.). Westport, CT: Libraries Unlimited. ISBN 978-1598845198/1598845195. 320 pages.
- Cole, Timothy, Myung-Ja Han, Jordan Vannoy. 2012. Descriptive Metadata, Iconclass, and Digitized Emblem Literature. In *Proceedings of the 12th ACM/IEEE-CS Joint Conference on Digital Libraries*. New York: Association for Computing Machinery: 111-120.
- Cole, Timothy W. and Myung-Ja Han. 2012. Developing Digital Library Services to Support Emblem Studies. *Emblematica: An Interdisciplinary Journal for Emblem Studies* 19: 65-94.
- Cole, Timothy W. and Myung-Ja Han. 2012. Library Workflows to Provide Emblem-Level Descriptions and Access. In *Emblem Digitization: Conducting Digital Research with Renaissance Texts and Images*, Mara R. Wade (ed.). (Special Issue, *Early Modern Literary Studies* 20.) http://purl.oclc.org/emls/si-20/WADE_Cole-Han-EMLS.htm.
- Cole, Timothy W., Myung-Ja Han, Doug Moncur and Harriett E. Green. 2011. Describing Collections & Collection Services for the BTP. In *DC-2011 -- The Hague: Proceedings of the International Conference on Dublin Core and Metadata Applications*: 74-79.
- Cole, Timothy, Neil Fraistat, David Greenbaum, Dave Lester, Emma Millon. 2011. Bamboo Technology Project: Building Cyberinfrastructure for the Arts and Humanities [Poster Abstract]. In *Digital Humanities 2011: Conference Abstracts*. Palo Alto, CA: Stanford University: 303-304. ISBN 978-0-911221-47-3.
- Cole, Timothy W. & Myung-Ja Han. 2011. The Open Annotation Collaboration Phase I: Towards a Shared, Interoperable Data Model for Scholarly Annotation. *Journal of the Chicago Colloquium on Digital Humanities and Computer Science*. 1 (3).

- Hunter, Jane, Timothy Cole, Robert Sanderson, Herbert Van de Sompel. 2010. The Open Annotation Collaboration: A Data Model to Support Sharing and Interoperability of Scholarly Annotations. In *Digital Humanities 2010: Conference Abstracts*. King's College London: 275-277.
- Han, Myung-Ja, Christine Cho, Timothy W. Cole, Amy S. Jackson. 2009. Metadata for Special Collections in CONTENTdm. *Journal of Library Metadata* 9 (3 & 4): 213-238.
- Jackson, Amy S., Myung-Ja Han, Kurt Groetsch, Megan Mustafoff, Timothy W. Cole 2008. Dublin Core Metadata Harvested through OAI-PMH. *J. of Library Metadata* 8(1): 5-21.
- Cole, Timothy W. and Nikki Wright. 2008. "Mathematics." In *Guide to Reference*, Robert Kieft (general ed.) Chicago: ALA Editions. Available: <http://www.guidetoreference.org/>
- Cole, Timothy W. and Muriel Foulonneau. 2007. *Using the Open Archives Initiative Protocol for Metadata Harvesting. Third Millennium Cataloging*, Susan Lazinger and Sheila Intner (series eds.). Westport, CT: Libraries Unlimited. ISBN: 978-1-59158-280-9.
- Cole, Timothy W. 2006. MathML in Practice: Issues and Promise. *CODATA Data Science Journal* 5: 209-218.
- Foulonneau, Muriel, Timothy W. Cole, Charles Blair, Peter C. Gorman, Kat Hagedorn, Jenn Riley. 2006. The CIC Metadata Portal: A Collaborative Effort in the Area of Digital Libraries. *Science & Technology Libraries* 26, no. 3/4:111-135.
- Chavez, Robert, Timothy W. Cole, Jon Dunn, Muriel Foulonneau, Thomas G. Habing, William Parod, Thorton Staples. 2006. DLF-Aquifer Asset Actions Experiment: Demonstrating Value of Actionable URLs. *D-Lib Magazine* 12 (10): online. DOI:[10.1045/october2006-cole](https://doi.org/10.1045/october2006-cole).
- Foulonneau, Muriel, Thomas G. Habing, and Timothy W. Cole. 2006. Automated Capture of Thumbnails and Thumbshots for Use by Metadata Aggregation Services. *D-Lib Magazine* 12 (1): online. DOI:[10.1045/january2006-foulonneau](https://doi.org/10.1045/january2006-foulonneau)
- Bartolo, Laura M., Timothy W. Cole, Sarah Giersch, and Michael Wright. 2005. NSF / NSDL Workshop on Scientific Markup Languages. *D-Lib Magazine* 11 (11): online. DOI:[10.1045/november2005-bartolo](https://doi.org/10.1045/november2005-bartolo)
- Foulonneau, Muriel and Timothy W. Cole. 2005. Strategies for reprocessing aggregated metadata, In *9th European Conference on Digital Libraries, ECDL 2005, September 18-23, 2005, Vienna, Austria, Proceedings*, Andreas Rauber, Stavros Christodoulakis, and A Min Tjoa (eds.). *Lecture Notes in Computer Science*, vol. 3652. Heidelberg: Springer-Verlag: 290 - 301.
- Bartolo, Laura M., Timothy W. Cole, Sarah Giersch, and Michael Wright. 2005. In Brief: Report on the NSF Workshop on Scientific Markup Language. *D-Lib Magazine* 11 (6) online. Available: <http://www.dlib.org/dlib/june05/06inbrief.html#BARTOLO>.
- Foulonneau, Muriel, Timothy W. Cole, Thomas G. Habing, Sarah L. Shreeves. 2005. Using Collection Descriptions to Enhance an Aggregation of Harvested Item-Level Metadata. In *Proceedings of the Fifth ACM/IEEE Joint Conference on Digital Libraries [Denver, June 7-11]*. New York, Association for Computing Machinery: 32-41.

- Shreeves, S.L., E.M. Knutson, B. Stvilia, C.L. Palmer, M.B. Twidale, & T.W. Cole. 2005. Is 'quality' metadata 'shareable' metadata? The implications of local metadata practice on federated collections. In *Proceedings of the Twelfth National Conference of the Association of College and Research Libraries, [Minneapolis, MN, April 7-10 2005]*, H.A. Thompson (ed.) Chicago, IL: Association of College and Research Libraries: 223-237.
- Stvilia, Besiki, Les Gasser, Michael Twidale, Sarah L. Shreeves, and Timothy W. Cole. 2004. Metadata quality for federated collections. In *Proceedings of ICIQ04 - 9th International Conference on Information Quality*. Cambridge, MA: 111-125.
- Habing, Thomas G., Timothy W. Cole, and William H. Mischo. 2004. Developing a Technical Registry of OAI Data Providers. In *8th European Conference on Digital Libraries, ECDL 2004, Bath, U.K., September 12 – 17, 2004, Proceedings*. Vol. in *Lecture Notes in Computer Science*. Heidelberg: Springer-Verlag: 400-410.
- Cole, Timothy W. & Sarah L. Shreeves. 2004. Guest Editorial: The IMLS NLG program: Fostering collaboration. *Library Hi Tech* 22 (3): 246-248.
- Cole, Timothy W. & Sarah L. Shreeves. 2004. Search and discovery across collections: The IMLS Digital Collections and Content Project. *Library Hi Tech* 22 (3): 307-322.
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INVITED LECTURES, WEBINARS & CONFERENCE PRESENTATIONS

- Cole, Timothy W., Alex Olivia Kinnaman, Deren Kudeki. 2017. "Exploring the Challenges & Uses of Linked Open Data for Digitized Special Collections," an ASIS&T DL SIG Webinar, 6 June 2017. <https://www.asist.org/events/webinars/exploring-the-challenges-uses-of-linked-open-data-for-digitized-special-collections/> (with links to MP4 and PDF).
- Cole, Timothy W. 2016. "Linked Data, Annotations & the Future of Mathematics Libraries," invited paper for the AMS Special Sessions on Mathematical Information in the Digital Age of Science, 2016 Joint Mathematics Meeting, Seattle, Washington, January 6-9. (http://jointmathematicsmeetings.org/amsmtgs/2181_abstracts/1116-00-1884.pdf)
- Cole, Timothy, Myung-Ja Han, Heidi Frank and Christine Schwartz. 2015 "Coding for Efficiencies in Cataloging and Metadata: Practical Applications of XML, XSLT, XQuery, and PyMarc for Library Data," an ALA [Annual] Pre-conference Workshop [full day].

- Cole, Tim & Doug Schepers. 2014. "Recent W3C Meetings: Web Annotations Workshop," presented at W3C Advisory Committee Meeting, Cambridge, MA, 10 June 2014.
- Cole, Timothy W. and Harriett Green. "Standards & Technologies for Integrating Digital Content Silos: Lessons Learned from Emblematica Online, Project Bamboo, Open Annotation & HTRC," presented at *CLARIN's Turn Towards the Literary Text*, Huygens ING, Den Haag, Netherlands, 29 October 2012.
- Cole, Timothy W. "OAI-ORE Experiments at the University of Illinois Library at Urbana-Champaign." Presented at *OAI-ORE Open Meeting*, Johns Hopkins University, Baltimore, MD, 3 March 2008. Updated version presented at *Open Archives Initiative - Object Reuse and Exchange, UK Open Day*, University of Southampton (UK), 4 April 2008.
- Foulonneau, Muriel and Timothy W. Cole. "Creating actionable URLs for the DLF-Aquifer asset action portal," at *Emory Metadata Enhancement Workshop 2006*, Atlanta, GA, 25 July 2006.
- Cole, Timothy W. "OAI-PMH in Practice: Lessons Learned from the IMLS Digital Collections & Content Project," at *Middle East Digital Library Workshop*, Alexandria, Egypt, 17 January 2006.
- Cole, Timothy W. and Simeon Warner. "Tutorial I: OAI-PMH repositories: quality issues regarding metadata and protocol compliance," at *2005 CERN Workshop on Innovations in Scholarly Communications (OAI-4)*, Geneva, Switzerland, October 20, 2005.
- Cole, Timothy "OAI Protocol for Metadata Harvesting & Its Usefulness to STM Publishers," at *2005 Allen Press Emerging Trends Seminar*, Washington, D.C., 13 April 2005.
- Cole, Timothy W. & Muriel Foulonneau. "Rationale for Interoperable Metadata," invited presentation at *The Economics of Digitization*, a symposium sponsored by Innodata Isogen and the Newberry Library, Chicago, IL: 17 May 2004.
- Cole, Timothy W., Sarah L. Shreeves, & Martin Halbert. "The Basics of OAI: An Introduction to the Protocol for Metadata Harvesting," invited pre-conference tutorial at *Web-Wise 2004*, Chicago, IL. March 3, 2004.
- Cole, Timothy W. "IMLS NLG Collection Registry & Item-Level Metadata Repository at the University of Illinois," invited presentation at the *4th Open Archives Forum Workshop*, Bath, U.K., September 4, 2003.
- Cole, Timothy W. "Using OAI-PMH to Aggregate Metadata Describing Cultural Heritage Resources," invited presentation at *Combined American Library Association / Canadian Library Association Annual Meeting*, Toronto, Canada, June 22, 2003.
- Cole, Timothy W. "OAI: What It Is and What It Could Mean for GILS Projects," invited presentation at *5th Annual State GILS Conference*, Lisle, IL, April 9, 2003.

- Cole, Timothy W. and Thomas G. Habing. "Introduction to XML" and "XML Tutorial," a two-day series of workshops presented to librarians and staff of the Colorado Digitization Program at University of Denver, Denver, CO, October 23 & 24, 2002.
- Cole, Timothy W. "Current OAI Tools and OAI v2 New Features," invited presentation at *OAI Standards for Sheet Music – Planning Meeting*, at University of Indiana, Bloomington, IN, March 28, 2002.
- Cole, Timothy W. "The IMLS Digital Library Forum Report: A Framework of Guidance for Building Good Digital Collections," invited paper read at *Web-Wise 2002: Building Digital Communities*, John Hopkins University, Baltimore MD, March 22, 2002.
- Cole, Timothy W. and Thomas G. Habing. "University of Illinois at Urbana-Champaign: OAI Alpha Experiences," at *Open Archives Initiative: Open Day for the US*, Jan. 23, 2001.
- Cole, Timothy W. "Beyond HTML: Extensible Markup Language (XML)," at *Gateways to Leadership: Annual Meeting and Conference of the American Association of Law Libraries* (Educational Program Session), Philadelphia, PA, July 19, 2000.
- Cole, Timothy W., William H. Mischo, and Thomas G. Habing. "XML Publishing Applications," Full-day pre-conference workshop given at *Annual Meeting of Council of Engineering and Scientific Society Executives*, Cleveland, OH, July 23, 1999.
- Mischo, William H. and Timothy W. Cole. "Lessons Learned in the UIUC Digital Library Initiative Project," *2-day series of talks presented at University of Notre Dame*, South Bend, IN, May 4 and 5, 1998.
- Mischo, William H. and Timothy W. Cole. "Processing and Access Issues for Full-Text Journals," at *Successes and Failures of the Digital Library Initiative: 35th Annual Graduate School of Library and Information Science Clinic, University of Illinois at Urbana-Champaign*, Urbana, IL, March 22-24, 1998.
- Cole, Timothy W. and William Mischo. "A Production Focus — User Perspectives," at *Symposium on Building Digital Collections*, University of Iowa Libraries, Iowa City, IA, December 12, 1997.
- Cole, Timothy W., "Implementing WWW Browsers and Servers in Libraries," at *Telecommunications, Access and Friendliness*, platform session, American Library Association Annual Conference, Chicago, IL, June 26, 1995.
- Cole, Timothy W., "Integrating Internet Resources into Science and Technology Libraries: Client Planning and Implementation," at *Science and Technology Section General Discussion Group*, Association of College and Research Libraries, American Library Association Mid-Winter Meeting, Philadelphia, PA, February 5, 1995.

Mischo, William H., Timothy W. Cole and Marie Erdman, "The Library OPAC: Gateway to Campus-Wide Information Systems and Global Information Resources," all-day post-conference workshop following the *8th Annual Computers in Libraries Conference*, Washington, D.C., March 4, 1993.

Cole, Timothy W., Leslie Troutman, William H. Mischo and Winnie Chan, "Design and Development of a Library Information Workstation," at *Designing Information: New Roles for Librarians, the 29th Annual Clinic on Library Applications of Data Processing*, Urbana, IL, April 6, 1992.

OTHER CONFERENCE PRESENTATIONS, WORKSHOPS, POSTERS, ETC.

Han, Myung-Ja (MJ) K. and Timothy W. Cole. 2018. "Enhancing identification, selection, and serendipity through LOD." LD4 Workshop, Stanford University Libraries, May 1-2. Available: https://drive.google.com/open?id=1uN_ecnabD6LufEY4hrWyx2Lqm1UoChHv.

Cole, Timothy W. 2018. "Using RDF Descriptions of Worksets to Enhance the Utility of Digital Libraries." LD4 Workshop, Stanford University Libraries, May 1-2. Available: <https://drive.google.com/open?id=110BuU2CZSBv9zKIP9wcV-dLgagpwi7fm>.

Cole, Timothy W. 2018. "The Use of LOD in Emblematica Online." Presented as part of a refereed roundtable, *Linked Open Data and the Digital Humanities*, at the 64th Annual Meeting of the Renaissance Society of America, 23 March, New Orleans, LA.

Cole, Tim, Barbara Cormack, Valerie Glenn, Lisa Rowilson de Ortiz, Josh Steverman, Kathryn Stine. 2018. "Mastering Metadata," a pre-conference half-day workshop. At HathiTrust UnCamp, University of California Berkeley, 25-26 January 2018.

Cole, Timothy. 2017. "Annotation and Publishing Standards Work at the W3C." Project Briefing at the CNI Fall Membership Meeting, Washington, D.C., Dec. 12. Abstract & links: <https://www.cni.org/topics/scholarly-communication/annotation-and-publishing-standards-work-at-the-w3c>.

Cole, Timothy. 2017. "What I learned (the hard way) from the W3C Web Annotation Working Group." Lightning talk at the LD4P / LD4L Community Input Meeting, Stanford University Libraries, April 24-25. Available: <https://drive.google.com/open?id=0B9-mZfnpqmpcTZUM1RVS3NIYXc>.

Cole, Timothy (presenter) and Myung-Ja K. Han. 2017. "Annotating Emblems: Enhancing User Interactivity with Emblematica Online." Presented as part of a refereed panel, *Annotation and Edition of Early Modern Genres*, at the 63rd Annual Meeting of the Renaissance Society of America, 31 March, Chicago, IL.

Cole, Timothy (presenter) and M. Janina Sarol. 2016. "Adding Annotation Functionality to Emblematica Online." Presented at the 11th Annual Conference on Open Repositories (OR 2016) in *Managing Annotations Panel*, 15 June, Trinity College, Dublin, Ireland.

- Cole, Timothy W., Kenning Arlitsch, Ted Fons, Janina Sarol. 2014. "Exposing Library Collections on the Web: Challenges and Lessons Learned." Project briefing at the CNI Fall Membership Meeting, Washington, D.C., Dec. Session abstract (slides & video link): <http://www.cni.org/topics/information-access-retrieval/exposing-library-collections-on-the-web-challenges-and-lessons-learned/>
- Lynch, Clifford, Patrick Ion, Timothy W. Cole. 2014. "Developing a 21st Century Global Digital Mathematics Library for Research." Project briefing at the CNI Fall Membership Meeting, Washington, D.C., Dec. Session abstract (link to Powerpoint slides): <http://www.cni.org/topics/ci/developing-a-21st-century-global-digital-mathematics-library-for-research/>
- Cole, Timothy W. (presenter) and Harriett Green (with slides and other contributions from Stephen Downie, Beth Plale, Colleen Fallaw, Megan Senseney, Katrina Fenlon, et al.). 2013. "HathiTrust Research Center: Improving Scholarly Inquiry," project briefing at the CNI Fall Membership Meeting, Washington, D.C., Dec. Session abstract (with slides link): <http://www.cni.org/topics/digital-libraries/f13-cole-hathitrust/>
- Downie, John S., Tim Cole, Beth Plale, Katrina Fenlon, Karen Wickett, and Megan Senseney. "The Workset Creation for Scholarly Analysis (WCSA) prototyping project: Background and goals." 2013. *Chicago Colloquium on Digital Humanities and Computer Science*. Chicago, IL, December.
- Gerber, Anna, Timothy W. Cole (presenter) and David Lowery. 2013. "Using SPARQL to Validate Open Annotation RDF Graphs," User Experience Briefing at the *W3C RDF Validation Workshop*, Cambridge, MA, September.
Abstract: http://www.w3.org/2001/sw/wiki/images/0/0b/RDFVal_Gerber_Cole_Lowery.pdf
Slides: <http://www.w3.org/2001/sw/wiki/images/b/be/UsingSPARQLforOA-V2.pdf>
- Cole, Timothy and Paolo Ciccarese. 2012. "Open Annotation Update: OAC Experiment Results and Ongoing Work of the W3C OA Community Group," project briefing at the *CNI Fall 2012 Membership Meeting*, Washington, D.C., Dec.
- Cole, Timothy W. 2012. "Using Open Annotation: Introduction and Overview," presented at *DLF Forum*, Denver, CO, November.
- Cole, Tim, Jacob Jett and Jordan Vannoy. "Annotation of Digital Emblematica," presented at *Open Annotation Collaboration phase II Project Review Meeting*, Chicago, IL, July 2012.
- Cole, Timothy W, Myung-Ja Han & Jordan Vannoy. "Digital Workflows and Interoperability for Emblem Studies," presented at the *Society for Emblem Studies Ninth International Conference*, Glasgow, Scotland: June, 2011.
- Cole, Timothy W. "Project Bamboo Collections Interoperability," presented as part of Bamboo Technology project briefing at the *CNI Fall 2010 Membership Meeting*, Washington, D.C., 14 December 2010.

- Sanderson, Robert, Timothy Cole, and Herbert Van de Sompel. "Annotating Scholarly Resources: An Update from the Open Annotation Collaboration," project briefing at the *CNI Fall 2010 Membership Meeting*, Washington, D.C., 13 December 2010.
- Cole, Timothy W. and Myung-Ja Han. 2010. "The Open Annotation Collaboration: Towards a Shared, Interoperable Data Model of Scholarly Annotation," presented at the *Chicago Colloquium on Digital Humanities and Computer Science*, Evanston, IL, 21 November.
- Cole, Timothy W. "The Open Annotation Collaboration," presented as part of Doing More with Less: A Community-Software-Based Technology Strategy Roundtable at *Museum Information, Museum Efficiency: Doing More with Less! Museum Computer Network 37th Annual Conference*, Portland, OR, 12 November 2009.
- Chao, Zoe, Myung-Ja Han & Timothy W. Cole. "Making Your Digitized Books Discoverable," presented at *DLF 2009 Spring Forum*, Raleigh, NC., 5 May, 2009.
- Cole, Timothy W. "Project Briefing: The Open Annotation Collaboration," presented at the *CNI Spring 2009 Membership Meeting*, Minneapolis, MN, 6 April 2009.
- Cole, Timothy W. "UIUC Post-Scanning Workflow," presented as part of *Facilitating Scholarly Use of Digital Resources* session at the *Annual Meeting of the Open Content Alliance*, San Francisco, CA, 17 October 2007.
- Cole, Timothy W. Participant in "Library Role in 1001 Novels," a panel at the *Chicago Digital Humanities and Computer Science Colloquium*, Evanston, IL, 21 Oct. 2007.
- Cole, Timothy W., Thomas G. Habing, Muriel Foulonneau. 2007. "An OAI-PMH Based Thumbnail Capture & Delivery Service." Poster presented at *CERN Workshop on Innovations in Scholarly Communication (OAI5)*. Geneva, Switzerland, April 18-20, 2007.
- Cole, Timothy W. and Thomas G. Habing. "The University of Illinois OAI-PMH Data Provider Registry," at *NSF – DLF – JISC/UKOLN Digital Library Service Registry Workshop*, National Science Foundation, Arlington, VA, 23 March 2006
- Cole, Timothy W. "MathML and Digital Libraries," at *International Scientific Data, Standards, & Digital Libraries [post-conference tutorial in conjunction with the 2005 Joint Conference on Digital Libraries]*, Denver, CO, June 11, 2005.
- Cole, Timothy W. "Use of Scientific Markup Languages in NSDL: Opportunities & Roadblocks," at *2004 National Science Digital Library (NSDL) Annual Meeting*, Chicago, IL, November 17, 2004.
- Cole, Timothy W. " The Open Archives Initiative Protocol for Metadata Harvesting and the IMLS Digital Collections & Content Project at the University of Illinois," at *23rd Annual Museum Computer Network (MCN) Conference*, Minneapolis, MN, November 12, 2004.

- Cole, Timothy W., William H. Mischo, Thomas G. Habing, & Ying-Ping Chen. "Enriching Metadata for XML Journal Articles Through Extraction of MathML and Function Names," invited presentation at *Enhancing the Searching of Mathematics*, an Institute for Mathematics and its Applications Hot Topics Workshop, University of Minnesota, Minneapolis, MN, April 26, 2004.
- Cole, Timothy W. "A Brief Introduction to OAI," presented at *NSDL & the Open Archives Initiative* session of the *2003 Annual All-Projects Meeting of the National Science Digital Library*, Washington, D.C., October 14, 2003.
- Cole, Timothy W. "Brief Overview of MathML," presented at *Scientific Markup Languages Birds of a Feather* session of the *2003 Annual All-Projects Meeting of the National Science Digital Library*, Washington, D.C., October 14, 2003.
- Cole, Timothy W., William H. Mischo, and Thomas G. Habing. "Introduction to the Open Archives Initiative Protocol for Metadata Harvesting," half-day tutorial at the *2003 Joint Conference for Digital Libraries*, Houston, TX, May 27, 2003.
- Mischo, William H., Timothy W. Cole, and Eric W. Weisstein. "Second Generation Digital Mathematics Resources with Innovative Content for Metadata Harvesting and Courseware Development," a poster session at *NSDL All Projects Annual Meeting*, Washington, D.C., December 2 -4, 2002.
- Cole, Timothy W. "You mean I have to do what with whom: Statewide museum/library collaborative digitization," a panel presentation at *2nd Association for Computer Machinery/Institute of Electrical and Electronic Engineering Joint Conference on Digital Libraries*, Portland, OR, July 15, 2002.
- Cole, Timothy W. "Plans for an OAI metadata harvesting service," at *Digital Library Federation Fall 2001 Forum*, Pittsburgh, PA, November 18, 2001.
- Habing, Thomas G., Timothy W. Cole, and William H. Mischo. "Qualified Dublin Core using RDF for Sci-Tech Journal Articles," at *DC-2001: International Conference on Dublin Core and Metadata Applications*, National Institute of Informatics, Tokyo, Japan: October 22-26, 2001.
- Cole, Timothy W. Participant in "The Open Archives Initiative: Perspectives on Metadata Harvesting," a panel at *ACM/IEEE Joint Conference on Digital Libraries*, Roanoke, VA, USA, June 24-28, 2001.
- Cole, Timothy W., William H. Mischo, Robert Ferrer, and Thomas G. Habing. "Using XML, XSLT, and CSS in a Digital Library," at *ASIS 2000: Knowledge Innovations -- 63rd American Society for Information Science Annual Meeting*, Chicago, IL, Nov. 15, 2000

- Cole, Timothy W., Thomas G. Habing, and William H. Mischo. "Illinois D-Lib Testbed: Technologies for Converting Legacy Mathematics for Display on the Web," at *MathML and Math on the Web*, Urbana, IL, October 21, 2000.
- Allen, Robert S., Timothy Cole, and John Schmitz. "Problems of Creating a Digital Library," at *SLA Food, Agriculture and Nutrition Division Annual Conference*, Philadelphia, June 13, 2000.
- Cole, Timothy W. and Thomas G. Habing. "Extensible Markup Language (XML)," *A Tutorial / Workshop for faculty & staff of the University Library*, Urbana, IL, June 2, 2000.
- Schmitz, John G., Timothy W. Cole, and Robert S. Allen. "Building an Outreach Digital Library Collection," at *NETC2000: National Extension Technology Conference*, College Station, TX May 24, 2000.
- Cole, Timothy W., Robert S. Allen, and John G. Schmitz. "Building an Outreach Digital Library Collection," at *Hot Topics 2000: Illinois Association of College and Research Libraries Spring Conference*, Matteson, IL, April 13, 2000.
- Ma, Wei and Timothy W. Cole. "Creating an Electronic Databases Selection Expert System," at *Hot Topics 2000: Illinois Association of College and Research Libraries Spring Conference*, Matteson, IL, April 13, 2000.
- Allen, Robert S., Timothy Cole, and John Schmitz. "Building a digital Outreach Information System: the Illinois Experience," at *United States Agricultural Information Network Meeting*, Manhattan, KS, April 22-24, 1999.
- Cole, Timothy W., William H. Mischo, and Mary C. Schlembach. "Changing Collaborations to Deliver Information in New Ways: Lessons Learned in the Illinois Digital Library Initiative Project," at *Racing Toward Tomorrow: Ninth National Conference of the Association of College and Research Libraries*, Detroit, MI, April 8-11, 1999.
- Mischo, William H. and Timothy W. Cole. "Metalanguage and Metadata Usage in Illinois Digital Library Initiative Project," at *Committee on Institutional Cooperation Metadata Conference*, Urbana, IL, November 15, 1998.
- Allen, Robert S., Timothy Cole, and John Schmitz. "Metadata Considerations for an Outreach Information System," at *Committee on Institutional Cooperation Metadata Conference*, Urbana, IL, November 15, 1998.
- Cole, Timothy W. "UIUC Digital Library Initiative: Testbed Design and Implementation," at *joint meeting of UIUC student and Chicago professional chapters of American Society for Information Science*, Urbana, IL, September 27, 1997.
- Cole, Timothy W., "Planning for Library Internet Access," at *Navigating the Internet: New Tools and State-of-the-Art Access*, one of a series of workshops sponsored by Lincoln Trail Libraries System and Rolling Prairie Library System, Urbana, IL, December 6, 1994.

Chrzastowski, Tina E., Timothy W. Cole, William H. Mischo and David Stern, "Interface Software for End-User Database Searching on Library Microcomputer Workstations," poster session presented by Tina Chrzastowski at *the Division of Chemical Education, American Chemical Society Annual Meeting*, Chicago, IL, August 23, 1993.

Mischo, William H. and Timothy W. Cole, "Information Technologies in the Grainger Library: The Extended Information Workstation," at *Engineering Library Division, American Society for Engineering Education Annual Meeting*, Urbana, IL, June 22, 1993.

Mischo, William H. and Timothy W. Cole, "The Library Information Workstation," part of *Academy At Work at IBM INFORMA 1992, Campus-Wide Information Systems: Leadership Roles for Libraries*, Hilton Head, SC, May 10-12, 1992. Software demonstrations of UIUC IO+ microcomputer interfaces at selected times throughout the conference.

DeSart, Melvin G. and Timothy W. Cole, "Integration of Heterogeneous Electronic Information Resources in Engineering," presented by Timothy W. Cole at *IEEE/ASEE Frontiers in Education, 21st Annual Conference*, Lafayette, IN, Sept. 23, 1991.

DeSart, Melvin G. and Timothy W. Cole, "Integration of Heterogeneous Electronic Information Resources in the Physical Sciences," poster session and software demonstration at *the Engineering Libraries Division, American Society for Engineering Education Annual Meeting*, New Orleans, LA, June 17, 1991.