

ASHLEY E. SANDS
sands.ashley@gmail.com

EDUCATION

University of California, Los Angeles September 2011- June 2017

PhD, Information Studies

Dissertation: *Managing Astronomy Research Data: Data Practices in the Sloan Digital Sky Survey and Large Synoptic Survey Telescope Projects*

Advisor: Christine L. Borgman Distinguished Professor and Presidential Chair in Information Studies

Committee: Jonathan Furner Chair and Associate Professor, Information Studies

Beverly Lynch Professor, Information Studies

Sharon Traweek Associate Professor, Gender Studies and History

University of California, Los Angeles September 2009-June 2011

MLIS, Master of Library and Information Science

Advisor: Jonathan Furner

University of Southern California August 2003-May 2007

BA, Bachelor of Arts, *Magna Cum Laude*

Double Major: Religion and Classics

EXPERIENCE

Senior Library Program Officer, Institute of Museum and Library Services Fall 2016-

Envisioning and cultivating a portfolio of national digital platform (NDP) library grants

Managing ongoing NDP program evaluation and 9-month virtual intern research activities

Supervising and serving as primary author on multiple team writing projects

Collaborating on the execution of two national convenings and accompanying follow-up reports

Composing and representing the agency in more than one dozen presentations annually

Co-coordinating 2017 agency-wide Combined Federal Campaign (CFC)

Monitoring over \$14 million in aggregated federal funds

Representing agency to the Board on Research Data and Information (BRDI)

Agency-wide expert on research data management, data science, scholarly communications

Graduate Student Researcher, UCLA Fall 2011-Fall 2016

Researched the data, society, and infrastructures surrounding modern astronomy sky surveys

Employed ethnographic field methods, semi-structured interviews, and document analysis

Mentored two-quarter Digital Humanities undergraduate intern

Funded by the National Science Foundation and the Alfred P. Sloan Foundation

Research Associate, West Semitic Research Project & Inscriptifact Fall 2007-2011

Executed and processed innovative multi-view digital capture methods of artifact photography

Trained and oversaw ten undergraduate students

Research Assistant, USC Archaeology Research Center Fall 2003-2011

Oversaw planning and execution of materials testing and research for 20 undergraduates
 Conducted archaeometric analysis of archaeological artifacts from Turkey
 Lead- and co-authored multiple research papers at international archaeological conferences

Registrar, Alalakh Excavations Summer 2010

Analyzed and created publishable records for hundreds of archaeological finds
 Oversaw the drawing and photography of incoming artifacts

Archaeologist, Alalakh Excavations Summer 2008-Summer 2009

Specialized in pottery analysis and organization
 Documented thousands of pottery sherds through drawing and photography

Archaeologist, Kenan Tepe Excavations Summer 2006/Summer 2008

Performed archaeological research on ceramic and metal slag
 Reconfigured depot warehouse and organizational system for storing all excavated materials

ACADEMIC AND PROFESSIONAL CONTRIBUTIONS**Peer Reviewer** Confidential

International Digital Curation Conference
 National Science Foundation, Division of Advanced Cyberinfrastructure
 iConference and iConference Doctoral Colloquium
 UCLA *InterActions*

Collaborator, Software Citation Policy Working Groups 2015-2016

CodeMeta Team Member: Developing a crosswalk table for software metadata
 Force11 Software Citation Working Group: Generating a consolidated set of citation principles
 AAS/GitHub workshop participant: Indexing Astronomical Software

Collaborator, Police Officer Involved Homicide (POI) Database Project 2014-2015

Founding member of social justice-based team research project
 Investigating the status of POI homicide data collection and access in LA County
 More information at <http://www.poihomicides.org/about.html>

Student Representative, Doctoral Planning Committee 2013-2014

Represent all UCLA Information Studies doctoral students to the PhD planning committee
 Serve on the panel determining doctoral admissions for 2014 cohort

National Chair, Social Media and Promotion for WAC-7 2012

Created and ran online promotion campaign for major international archaeology conference
 Organized committee of a dozen international archaeology students

Chair, World Archaeological Congress' Global Libraries Program 2009-2016

Organize the donation of archaeological research resources donated to 35 international libraries
 Chair a committee of nine international scholars

Co-Chair, Next Generation Project 2009-2011
 Mobilizing students and young archaeology professionals through social networking
 Engaging student participants in international conferences

AWARDS AND FELLOWSHIPS

Co-author to successful \$1.4M Alfred P. Sloan Foundation grant	2015
UCLA Information Studies Hal Borko Fellowship / Dean's Scholar	2015
Doctoral Colloquium Invited Participant, iConference	2015
Regents Stipend	2015
10 th IEEE International Conference on e-Science Student Sponsorship	2014
Fully-funded Graduate Student Researcher position	Fall 2011-Fall 2016
Unrestricted Fellowship awarded by UCLA Graduate Division	Fall 2012-Fall 2016
Special Libraries Association, Southern California: Karen Sternheim Scholarship	2010
American Business Women's Association (ABWA) Scholarship	2009-2010
Phi Beta Kappa Undergraduate Recognition Award	2007
USC Provost Undergraduate Research Symposium Awards	2007
Interdisciplinary Award (equivalent to 1 st prize) in the Social Sciences	
"Rewriting the History of Technology: unique proof of tin bronze manufacture"	
First Place in the Humanities category (group entry)	
"Re-examining the Past: a Multi-University Collaborative Research and	
Mentoring Project on Ancient Near Eastern Cylinder Seals"	

MEMBERSHIPS

American Library Association (ALA)
 Association of College & Research Libraries (ACRL)
 Association for Information Science and Technology (ASIS&T)
 Future of Research Communications and e-Scholarship (Force11)
 Research Data Alliance (RDA)
 World Archaeological Congress (WAC)

REFEREED JOURNAL ARTICLES

Borgman, C. L., Golshan, M. S., Sands, A. E., Wallis, J. C., Cummings, R. L., Darch, P. T., & Randles, B. M. (2016). Data Management in the Long Tail: Science, Software, and Service. *International Journal of Digital Curation*, 11(1), 128–149.
<https://doi.org/10.2218/ijdc.v11i1.428>

Borgman, C. L., Darch, P. T., Sands, A. E., Pasquetto, I. V., Golshan, M. S., Wallis, J. C., & Traweek, S. (2015). Knowledge infrastructures in science: data, diversity, and digital libraries. *International Journal on Digital Libraries*, 16(3-4), 207–227.
<http://doi.org/10.1007/s00799-015-0157-z>

Darch, P. T., Borgman, C. L., Traweek, S., Cummings, R. L., Wallis, J. C., & Sands, A. E. (2015). What lies beneath?: Knowledge infrastructures in the subseafloor biosphere and

beyond. *International Journal on Digital Libraries*, 16(1), 1–17.
<http://doi.org/10.1007/s00799-015-0137-3>

Sands, A. E., Borgman, C. L., Traweek, S., & Wynholds, L. A. (2014). We're Working On It: Transferring the Sloan Digital Sky Survey from Laboratory to Library. *International Journal of Digital Curation*, 9(2), 98–110. <http://doi.org/10.2218/ijdc.v9i2.336>

Sands, A. E. (2012). Scholarly Publication and WAC: The Need for a Critical Response. *Archaeologies*, 8(1), 12–17. <http://doi.org/10.1007/s11759-012-9196-x>

REFEREED CONFERENCE PAPERS

Darch, P. T., & Sands, A. E. (2017). Uncertainty About the Long-Term: Digital Libraries, Astronomy Data, and Open Source Software. In *2017 IEEE/ACM Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada.

Borgman, C. L., Darch, P. T., Sands, A. E., & Golshan, M. S. (2016). The Durability and Fragility of Knowledge Infrastructures: Lessons Learned from Astronomy. In *Proceedings of the 79th Association for Information Science and Technology Annual Meeting* (Vol. 53). Copenhagen: ASIS&T. <https://arxiv.org/abs/1611.00055>

Pasquetto, I. V., Sands, A. E., Darch, P. T., & Borgman, C. L. (2016). Open Data in Scientific Settings: From Policy to Practice. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 1585–1596). New York, NY, USA: ACM. <http://doi.org/10.1145/2858036.2858543>

Borgman, C. L., Golshan, M. S., Sands, A. E., Wallis, J. C., Cummings, R. L., & Randles, B. M. (2016). Data Management in the Long Tail: Social and Technical Opportunities. Presented at the 11th International Digital Curation Conference, Amsterdam. *Tied Runner-Up for Best Research Paper*.

Pasquetto, I. V., Sands, A. E., & Borgman, C. L. (2015). Exploring Openness in Data and Science: What is “Open,” to Whom, When, and Why? In *Proceedings of the Association for Information Science and Technology* (Vol. 52, pp. 1–2). St. Louis, MO. <http://doi.org/10.1002/pra2.2015.1450520100141>

Darch, P. T., & Sands, A. E. (2015). Beyond Big or Little Science: Understanding Data Lifecycles in Astronomy and the Deep Subseafloor Biosphere. In *Proceedings of the iConference 2015*, Newport Beach, CA. <http://hdl.handle.net/2142/73655>

Borgman, C. L., Darch, P. T., Sands, A. E., Wallis, J. C., & Traweek, S. (2014). The ups and downs of knowledge infrastructures in science: Implications for data management. In *2014 IEEE/ACM Joint Conference on Digital Libraries (JCDL)* (pp. 257–266). <http://doi.org/10.1109/JCDL.2014.6970177>

Wynholds, L. A., Wallis, J. C., Borgman, C. L., Sands, A. E., & Traweek, S. (2012). Data, Data Use, and Scientific Inquiry: Two Case Studies of Data Practices. In *Proceedings of the 12th ACM/IEEE-CS Joint Conference on Digital Libraries* (pp. 19–22). New York, NY, USA: Association for Computing Machinery. <http://doi.org/10.1145/2232817.2232822>

POLICY REPORTS

Owens, T. J., Sands, A. E., Reynolds, E., Neal, J., Mayeaux, S., & Marx, M. (In Production). Digital Infrastructures that Embody Library Principles: The IMLS National Digital Platform as a Framework for Digital Library Tools and Services. In P. Fernandez & K. Tilton (Eds.), *Applying Library Values to Emerging Technology: Tips and Techniques for Advancing within Your Mission*. Association of College and Research Libraries.

Owens, T. J., Sands, A. E., Reynolds, E., Neal, J., & Mayeaux, S. (2017). *NDP at Three: The First Three Years of IMLS Investments to Enhance the National Digital Platform for Libraries*. Institute of Museum and Library Services. <https://www.imls.gov/publications/ndp-three-report>

Hanisch, R., Hildreth, M., McEwan, L., Stodden, V., Watts, G., Katz, D. S., Meyers, N., & Sands, A. E. (2017). Final Report: Workshops to Gauge the Impact of Requirements for Public Access to Data Produced by NSF-funded Research in Mathematics and the Physical Sciences. <https://mpsopendata.crc.nd.edu/index.php/final-report>

Owens, T. J., Sands, A. E., Reynolds, E., Neal, J., and Mayeaux, S. (2017). Guest Editorial: Libraries Advancing the National Digital Platform. *D-Lib Magazine*, May/June 2017, 23(5/6). <https://doi.org/10.1045/may2017-guest-editorial>

CodeMeta: an exchange schema for software metadata. (2016 v.1; 2017 v.2).
[doi:10.5063/schema/codemeta-1.0](https://doi.org/10.5063/schema/codemeta-1.0) ; [doi:10.5063/schema/codemeta-2.0](https://doi.org/10.5063/schema/codemeta-2.0)

PRESENTATIONS

Sands, A. E. (2017). *Funding Your STEAM Projects: Applying for IMLS Grants*. Webinar presented at the Library Journal's Mission Possible: Empower Your Community with Coding.

Sands, A. E. (2017). *Agency Priorities of the Institute of Museum and Library Services*. Oral Presentation at the Fall 2017 Board on Research Data and Information (BRDI) Board Meeting, National Academy of Sciences, Washington, DC.

Sands, A. E. (2017). *Funding Opportunities at the Institute of Museum and Library Services*. Lightning Talk presented at the Digital Library Federation (DLF) Liberal Arts Colleges/HBCUs Pre-Conference, Pittsburgh, PA.

- Sands, A. E. (2017). *The IMLS National Digital Platform: Research Data Management & Digital Scholarship Services*. Webinar presented at the Council on Library and Information Resources (CLIR) and Digital Library Forum (DLF) E-Research Network Course.
- Sands, A. E. (2017). *The IMLS National Digital Platform and Web Archiving*. Oral Presentation to the Web Archiving and Digital Libraries (WADL) workshop at the *IEEE/ACM Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada.
- Sands, A. E., & Greenberg, J. (2017). *Funder Panel*. Oral Panel Presentation presented at the “Data Science in Libraries” forum, Pittsburgh, PA.
- Sands, A. E. (2017). *Research Data and Libraries: The IMLS National Digital Platform Funding Category*. Lightning Talk presented at the Research Data Access and Preservation (RDAP) Summit, Seattle, WA.
- Sands, A. E. (2017). *Understanding Grant Funding Opportunities for Digital Library Projects*. Oral panel presentation at the Association of College and Research Libraries (ACRL) conference. Baltimore, MD.
- Sands, A. E. (2017). Library Publishing and the IMLS National Digital Platform. Oral presentation at the Library Publishing Forum annual meeting. Baltimore, MD.
- Sands, A. E., & Isaksen, M. (2017, February). *Grant Opportunities from the Institute of Museum and Library Services*. Oral Presentation presented at the Grants Resource Center (GRC) Funding Competitiveness Conference, Washington, D.C.
- Sands, A. E. (2017). *Agency Priorities of the Institute of Museum and Library Services*. Oral Presentation at the Spring 2017 Board on Research Data and Information (BRDI) Board Meeting, National Academy of Sciences, Washington, DC.
- Borgman, C. L., Darch, P. T., Sands, A. E., & Golshan, M. S. (2017). *Durability and Fragility of Knowledge Infrastructures: Lessons Learned from Astronomy*. Oral presentation to the Astrophysics Journal Club, UCLA Division of Astronomy & Astrophysics.
- Borgman, C. L., Sands, A. E., & Golshan, M. S. (2017). *Users and uses of a digital data archive: A case study of DANS*. Keynote presented at the KNOWeSCAPE, Sofia, Bulgaria.
- Darch, P. T., & Sands, A. E., Borgman, C.L., Golshan, M.S., Traweek, S. (2017). From Sky to Archive: Long Term Management of Sky Survey Data. Oral Presentation at the 229th Meeting of the American Astronomical Society, Grapevine, TX.
- Sands, A. E. (2017). *The IMLS National Digital Platform Funding Category*. Oral webinar presented to the SHARE Curation Associates. Webinar.
- Borgman, C. L., Scharnhorst, A., van den Berg, H., van de Sompel, H., Sands, A. E., Golshan, M. S., & Treloar, A. (2016). *Motivations for Sharing and Reusing Data: Complexities*

- and Contradictions in the Use of a Digital Data Archive*. Oral presentation, DANS, The Hague, The Netherlands.
- Owens, T. J. & Sands, A.E. (2016). *Agency Priorities of the Institute of Museum and Library Services*. Oral presentation at the Fall 2016 Board on Research Data and Information (BRDI) Board Meeting. National Academy of Sciences, Washington, DC.
- Borgman, C. L., Scharnhorst, A., Sands, A. E., Golshan, M. S., & Treloar, A. (2016). *Motivations for Sharing and Reusing Data: Complexities and Contradictions in the Use of a Digital Data Archive*. Oral Seminar Presentation at the Quello Center on Media, Communication, and Information Policy, Michigan State University.
- Borgman, C. L., Scharnhorst, A., Sands, A. E., Golshan, M. S., & Treloar, A. (2016). *Motivations for Sharing and Reusing Data: Complexities and Contradictions in the Use of a Digital Data Archive*. Oral presentation at the ICPSR Council Meeting, ICPSR, University of Michigan.
- Sands, A. E., & Borgman, C. L. (2016). *Open Data in Astronomy Sky Surveys*. Panel Presentation at SciDataCon: Advancing the Frontiers of Data in Research, Denver, CO.
- Pasquetto, I. V., & Sands, A. E. (2016). *Scientific Open Data: Questions of Labor and Public Benefit*. Oral presentation at the 4S/EASST 2016: Science and Technology by Other Means, Barcelona.
- Sands, A. E. (2016, August). *Data Management in the Sloan Digital Sky Survey and Large Synoptic Survey Telescope Projects*. Presented at the IPAC LSST Weekly Team Meeting, Infrared Processing and Analysis Center (IPAC).
- Sands, A. E., & Darch, P. T. (2016). *What does it mean to manage sky survey data? A model to facilitate stakeholder conversations*. Oral Presentation at the 228th Meeting of the American Astronomical Society, San Diego, CA.
- Darch, P. T., & Sands, A. E. (2016). *It's about time: How do sky surveys manage uncertainty about scientific needs many years into the future*. Oral Presentation at the 228th Meeting of the American Astronomical Society, San Diego, CA.
- Sands, A. E. (2016). *Data Management in the Sloan Digital Sky Survey and Large Synoptic Survey Telescope Projects*. Poster presented at the Cultural Patterns: Multiscale Data-driven Models, Institute for Pure and Applied Mathematics, UCLA.
- Randles, B. M., Sands, A. E., & Borgman, C. L. (2016). *Too big to share? Scaling up knowledge transfer workflows from little science to big science*. Poster presented at the FORCE 2016 Conference, Portland, OR. *Recognition for Best Poster*.
- Sands, A. E. (2016). *Data Infrastructures in the Sloan Digital Sky Survey and Large Synoptic Survey Telescope Projects*. Poster presented at FORCE 2016 Conference, Portland, OR.

Sands, A. E., & Golshan, M. S. (2016). *Research Data Management in Astronomy*. Presented at the Trends in eHumanities, Amsterdam.

Sands, A. E., & Golshan, M. S. (2016). *What is Data Management? Interpreting stakeholder expectations for archiving and serving research data*. Presented at the DANS colloquium, The Hague.

Darch, P. T., Sands, A. E., & Traweek, S. (2015). *Designing Data Infrastructures with Multiple, Disparate Networks*. Oral presentation at the 4S 40th Annual Meeting, Denver, CO.

Currie, M., Paris, B., Pasquetto, I. V., Pierre, J., Sands, A. E., & Lievrouw, L. A. (2015). *Police Officer-Involved Homicide Database Project*. Oral presentation at the iConference 2015, Newport Beach, CA.

Sands, A. E. (2015). *Managing Astronomy Research Data: Case Studies of Big and Small Research Projects*. Oral presentation at the 225th American Astronomical Society Meeting, Seattle, WA.

Sands, A. E. (2014). *Managing Astronomy Research Data: Case Studies of Big and Small Research Projects*. Poster presented at the 10th IEEE International Conference on e-Science, Guarujá, Sao Paulo, Brazil.

Sands, A. E. (2014). *Who will manage scientific research data?* Poster presented at the Research Data Access and Preservation Summit 2014, San Diego, CA.

Sands, A. E. (2014). *Scientific Research Data: Volume, Infrastructure, and Management Expertise*. Oral presentation at Why Things Matter conference, California State Fullerton.

Sands, A. E., Borgman, C. L., Wynholds, L. A., & Traweek, S. (2014). "We're Working on It:" *Transferring the Sloan Digital Sky Survey from Laboratory to Library*. Oral presentation at the 9th International Digital Curation Conference, San Francisco, CA.

Sands, A. E., Traweek, S., & Borgman, C. L. (2013). *Co-Producing Knowledge: Scientific Research Data Practices and Workforce*. Oral presentation at the Society for Social Studies of Science (4S) annual meeting, San Diego, CA.

Sands, A. E., Aguilar, M. A., & Pappu, S. (2013). *The WAC Global Libraries Program*. Poster presented at the Seventh World Archaeological Congress, The Dead Sea, Jordan.

Borgman, C. L., Sands, A. E., & Wynholds, L. A. (2013). *Astronomy: On the Bleeding Edge of Scholarly Infrastructure*. Poster presented at the American Astronomical Society, Long Beach, CA.

Sands, A. E., Borgman, C. L., Wynholds, L. A., & Traweek, S. (2012). *Follow the Data: How astronomers use and reuse data*. Poster presented at the Association for Information Science and Technology 75th Annual Meeting, Baltimore, MD.

Sands, A. E., Borgman, C. L., Wynholds, L. A., & Traweek, S. (2012). *Surf's Up: Riding the Big Data Wave*. Poster presented at the Internet, Politics, Policy 2012: Big Data, Big Challenges, Oxford Internet Institute, University of Oxford.

Sands, A. E., & Butler, K. (2010). The Next Generation Project: Discussing Archaeology in Conflict (Vol. 55/VI). Oral presentation at the International Conference on "Archaeology in Conflict," Vienna, Austria: Forum Archaeologiae.

Sands, A. E., & Butler, K. (2010). The Next Generation: Mobilizing Social Networks for Heritage-based International Cooperation. *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East Volume 2* (pp. 139–149). London, U.K.

Sands, A. E., & Butler, K. (2010). The Next Generation: Students Discuss Archaeology in the 21st Century. *Present Pasts* (Vol. 2/1, pp. 209–216). doi:10.5334/pp.34

Butler, S., Dodd, L., Sands, A. E., & Harrington, L. (2010). Visualizing the Native American Cultural Landscape. A Significant New Research and Imaging Method. In K. Hedges (Ed.), (Vol. 36, pp. 53–58). American Rock Art Research Association.

Harrington, L., Dodd, L., Sands, A. E., Butler, S., & Freers, S. (2009). Visualizing the Native American Cultural Landscape: A Significant New Research and Imaging Method (Vol. 23). Oral presentation at the Society for California Archaeology.

Dodd, L., Abraham, M., & Sands, A. E. (2007). *Direct Evidence for Bronzeworking Techniques in the Upper Tigris River Region*. Oral presentation at the Annual Meeting of the American Schools of Oriental Research (ASOR), San Diego, CA.

Sands, A. E., Dodd, L., & Abraham, M. (2007). *Middle Bronze Age Pottery Production in the Upper Tigris River Valley: a view from Kenan Tepe*. Oral presentation at the Society for American Archaeology (SAA) Annual Meeting, Austin, TX.

Dodd, L., Painter, C., Parker, B., Abraham, M., Sands, A. E., & Zhang, C. (2005). *The Upper Tigris Archaeological Research Project (UTARP): A Report on the 2004-2005 Excavation Seasons at Kenan Tepe*. Oral presentation at the Annual Meeting of the American Schools of Oriental Research (ASOR), Philadelphia, PA.

Dodd, L., Abraham, M., Sands, A. E., Zhang, C., & Parker, B. (2005). *Bronze Age furnace from the Upper Tigris River*. Poster presented at the Metallurgy - a touchstone for cross-cultural interaction, British Museum, London.