

**DECLARATION OF DR. JAMES L. MULLINS**  
**REGARDING U.S. PATENT NO. 7,995,047**

## Table of Contents

	Page
I. INTRODUCTION .....	3
II. QUALIFICATIONS .....	4
III. BACKGROUND ON PUBLIC ACCESSIBILITY .....	6
A. Scope of This Declaration .....	6
B. Person of Ordinary Skill in the Art .....	8
C. Library Catalog Records and Other Resources .....	10
D. Periodicals .....	13
IV. OPINION REGARDING AUTHENTICITY AND PUBLIC ACCESSIBILITY .....	15
A. Authenticity .....	15
B. Public Accessibility .....	19
1. Evidence of Public Accessibility Through Print Copies in Libraries .....	19
2. Other Evidence of Public Accessibility .....	23
C. Conclusion .....	24
V. RIGHT TO SUPPLEMENT .....	25
VI. JURAT .....	25

I, Dr. James L. Mullins, declare as follows:

## **I. INTRODUCTION**

1. My name is Dr. James L. Mullins. I have been retained by Baker Botts and understand that the opinions I express herein may be filed publicly, including in connection with *inter partes* review proceedings for U.S. Patent No. 7,995,047.

2. I am presently Dean Emeritus of Libraries and Esther Ellis Norton Professor Emeritus at Purdue University. My career as a professional and academic/research librarian spanned more than 44 years including library positions at Indiana University, Villanova University, Massachusetts Institute of Technology, and Purdue University. Appendix A is a true and correct copy of my curriculum vitae describing my background and experience.

3. In 2018, I founded the firm Prior Art Documentation Librarian Services, LLC, now located at 205 St. Cuthbert, Williamsburg, VA 23188. Further information about my firm, Prior Art Documentation Librarian Services, LLC (PADLS), is available at [www.priorartdoclib.com](http://www.priorartdoclib.com).

4. I have been retained by Baker Botts to research and then offer my opinions on the authenticity and dates of public accessibility of various documents. For this service, I am being paid my usual hourly fee of \$275. I have no stake in the outcome of this proceeding or any related litigation or administrative proceedings,

and my compensation in no way depends on the substance of my testimony or the outcome of this proceeding.

## **II. QUALIFICATIONS**

5. I received a Bachelor of Arts degree in History, Religion and Political Science in 1972 as well as a Master of Arts degree in Library Science in 1973 from the University of Iowa. I received my Ph.D. in Academic Library Management in 1984 from Indiana University. Over the past forty-four years, I have held various positions as a leader in the field of library and information sciences.

6. I am presently Dean Emeritus of Libraries and Esther Ellis Norton Professor Emeritus at Purdue University, and have been since January 1, 2018. I have been previously employed as follows:

- Dean of Libraries and Professor and Esther Ellis Norton Professor, Purdue University, West Lafayette, IN (2004-2017)
- Assistant/Associate Director for Administration, Massachusetts Institute of Technology (MIT) Libraries, Cambridge, MA (2000-2004)
- University Librarian and Director, Falvey Memorial Library, Villanova University, Villanova, PA (1996-2000)
- Director of Library Services, Indiana University South Bend, South Bend, IN (1978-1996)

- Part-time Instructor, School of Library and Information Science, Indiana University, Bloomington, IN (1979-1996)
- Associate Law Librarian, and associated titles, Indiana University School of Law, Bloomington, IN (1974-1978)
- Catalog Librarian, Assistant Professor, Georgia Southern College (now University), Statesboro, GA (1973-1974)

7. I am a member of the American Library Association (“ALA”), where I served as the chair of the Research Committee of the Association of College and Research Libraries (“ACRL”). My service to ALA included service on the editorial board of the most prominent library journal, *College and Research Libraries*. I also served on the Standards Committee, College Section of the Association of College and Research Libraries, where I was instrumental in developing a re-issue of the *Standards for College Libraries* in 2000.

8. I am an author of numerous publications in the field of library science, and have given presentations in library sciences at national and international conferences. During more than 44 years as an academic librarian and library science scholar, I have gained extensive experience with catalog records and online library management systems (“LMS”) built using Machine-Readable Cataloging (“MARC”) standards. As an academic library administrator, I have had responsibility to ensure that students were educated to identify, locate, assess, and

integrate information garnered from research library resources. I have also facilitated the research of faculty colleagues either directly or through the provision of and access to the requisite print and/or digital materials and services at the universities where I worked.

9. Based on my decades of experience, identified above, and detailed in my curriculum vitae, I consider myself to be an expert in the field of library science and academic library administration. I have previously offered my opinions on the public availability and authenticity of documents in over 40 cases. I have been deposed in one case.

### **III. BACKGROUND ON PUBLIC ACCESSIBILITY**

#### **A. Scope of This Declaration**

10. I am not a lawyer, and I am not rendering an opinion on the legal question of whether a particular document is, or is not, a “printed publication” under the law. I am, however, rendering my expert opinion on the authenticity of the documents referenced herein, and when and how these documents were disseminated or otherwise made publicly accessible to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, could have located the documents.

11. I am informed by counsel that an item is considered authentic if there is sufficient evidence to support a finding that the item is what it is claimed to be. I

am also informed that authenticity can be established based on the contents of the document itself, such as the appearance, content, substance, internal patterns, or other distinctive characteristics of the item.

12. I am informed by counsel that a given reference qualifies as “publicly accessible” if it was disseminated or otherwise made available such that a person interested in and ordinarily skilled in the relevant subject matter could locate it through the exercise of ordinary diligence.

13. While I understand that the determination of public accessibility under the foregoing standard rests on a case-by-case analysis of the facts particular to an individual publication, I also understand that a printed publication is rendered “publicly accessible” if it is cataloged and indexed by a library such that a person interested in the relevant subject matter could locate it (i.e., I understand that cataloging and indexing by a library is sufficient, though there are other ways that a printed publication may qualify as “publicly accessible”). One manner of sufficient indexing is indexing according to subject matter. I understand that it is not necessary to prove someone actually looked at the printed publication in order to show it was publicly accessible by virtue of a library’s cataloging and indexing thereof. I understand that cataloging and indexing by a single library of a single instance of a particular printed publication is sufficient. I understand that, even if access to a library is restricted (although that is not the case for the documents I researched in

this declaration), a printed publication that has been cataloged and indexed therein is publicly accessible so long as a presumption is raised that the portion of the public concerned with the relevant subject matter would know of the printed publication. I also understand that the cataloging and indexing of information that would guide a person interested in the relevant subject matter to the printed publication, such as the cataloging and indexing of an abstract for the printed publication, is sufficient to render the printed publication publicly accessible. I understand the citation of a publication by others in the field is one factor to consider in determining public accessibility.

14. I understand that evidence showing the specific date when a printed publication became publicly accessible is not necessary. Rather, routine business practices, such as general library cataloging and indexing practices, can be used to establish an approximate date on which a printed publication became publicly accessible.

**B. Person of Ordinary Skill in the Art**

15. In forming the opinions expressed in this declaration, I have reviewed the documents and appendices referenced herein. These materials are records created in the ordinary course of business by publishers, libraries, indexing services, and others. From my decades of experience, I am familiar with the process for creating many of these records, and I know that these records are created by people



with knowledge of the information contained within the record. Further, these records are created with the expectation that researchers and other members of the public will use them. All materials cited in this declaration and in the related exhibits are of a type that experts in my field would reasonably rely upon and refer to in forming their opinions.

16. I have been informed by counsel that the subject matter of this proceeding relates to electronic circuitry for driving displays such as an organic EL (electro-luminescence) panels, LED panels, and the like.

17. I have been informed by counsel that a “person of ordinary skill in the art at the time of the inventions” (POSITA) is a hypothetical person who is presumed to be familiar with the relevant field and its literature at the time of the inventions. This hypothetical person is also a person of ordinary creativity, capable of understanding the scientific principles applicable to the pertinent field.

18. I have been informed by counsel that persons of ordinary skill in this subject matter or art would have included someone with at least an undergraduate degree in electrical engineering (or equivalent subject) together with two or three years of experience in designing circuits for driving light-emitting devices including organic light-emitting diodes, or a Ph.D. with experience in the same.

19. I understand from counsel U.S. Patent No. 7,995,047 was filed in the United States on December 12, 2007 and that it purports to claim priority to an

application filed in Japan on December 13, 2006. The Shimoda reference I discuss herein has a copyright date of 2003. Accordingly, I have been asked to assess public accessibility from the 2003-2006 timeframe. By the 2003-2006 timeframe, a person of ordinary skill in the art would have had access to a vast array of print resources, including at least the documents referenced below, as well as to an ever-expanding set of online resources.

### **C. Library Catalog Records and Other Resources**

20. Some background on MARC (Machine-Readable Cataloging) formatted records, OCLC, and WorldCat is helpful to understand the library catalog records discussed in this declaration. I am fully familiar with the library cataloging standard known as the MARC standard, which is an industry-wide standard method of storing and organizing library catalog information<sup>1</sup>. MARC practices have been consistent since the MARC format was developed by the Library of Congress in the 1960s, and by the early 1970s became the U.S. national standard for disseminating bibliographic data. By the mid-1970s, MARC format became the international standard, and persists through the present. A MARC-compatible library is one that has a catalog consisting of individual MARC records for each of its items. The underlying MARC format (computer program) underpins the online public access

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<sup>1</sup> The full text of the standard is available from the Library of Congress at <http://www.loc.gov/marc/bibliographic/>.

catalog (OPAC) that is available to library users to locate a particular holding of a library. Today, MARC is the primary communications protocol for the transfer and storage of bibliographic metadata in libraries<sup>2</sup>. The MARC practices discussed below were in place during the late 1990s time frame relevant to the documents referenced herein.

21. Online Computer Library Center (“OCLC”) is a not-for-profit worldwide consortium of libraries. Similar to MARC standards, OCLC’s practices have been consistent since the 1970s through the present. Accordingly, the OCLC practices discussed below were in place during the time frame discussed in my opinions section. OCLC was created “to establish, maintain and operate a computerized library network and to promote the evolution of library use, of libraries themselves, and of librarianship, and to provide processes and products for the benefit of library users and libraries, including such objectives as increasing availability of library resources to individual library patrons and reducing the rate of rise of library per-unit costs, all for the fundamental public purpose of furthering

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<sup>2</sup> Almost every major library in the world uses a catalog that is MARC-compatible. See, e.g., Library of Congress, *MARC Frequently Asked Questions (FAQ)*, <https://www.loc.gov/marc/faq.html> (last visited Mar. 2, 2020) (“MARC is the acronym for MACHine-Readable Cataloging. It defines a data format that emerged from a Library of Congress-led initiative that began nearly forty years ago. It provides the mechanism by which computers exchange, use, and interpret bibliographic information, and its data elements make up the foundation of most library catalogs used today.”). MARC is the ANSI/NISO Z39.2-1994 (reaffirmed 2009) standard for Information Interchange Format.

ease of access to and use of the ever-expanding body of worldwide scientific, literary and educational knowledge and information.”<sup>3</sup> Among other services, OCLC and its members are responsible for maintaining the WorldCat database (<http://www.worldcat.org/>), used by libraries throughout the world.

22. *WorldCat* is the world’s largest public online catalog, maintained by the OCLC, a not-for-profit international library consortium, and built with the records created by the thousands of libraries that are members of OCLC. OCLC provides bibliographic and abstract information to the public based on MARC-compliant records through its OCLC *WorldCat* database. *WorldCat* requires no knowledge of MARC tags and code and does not require a login or password. *WorldCat* is easily accessible through the World Wide Web to all who wish to search it; there are no restrictions to be a member of a particular community, etc. The date a given catalog record was created (corresponding to the MARC Field 008) appears in some detailed *WorldCat* records as the Date of Entry but not necessarily all. *WorldCat* does not provide a view of the underlying MARC format for a specific *WorldCat* record. In order to see the underlying MARC format the researcher must locate the book in a holding library listed among those shown in *WorldCat*, and

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<sup>3</sup> OCLC Online Computer Library Center, Inc., *Amended Articles of Incorporation of OCLC Online Computer Library Center, Inc.*, Third Article (OCLC, Dublin, Ohio) Revised November 30, 2016, <https://www.oclc.org/content/dam/oclc/membership/articles-of-incorporation.pdf>.

search the online public catalog (“OPAC”) of a holding library. Whereas *WorldCat* records are widely available, the availability of library specific MARC formatted records varies from library to library. When a specific library wishes to make the underlying MARC format available there will be a link from the library’s OPAC display, often identified as a MARC record or librarian/staff view.

#### **D. Periodicals**

23. A library typically creates a catalog record for a periodical publication (also referred to as a “serial”) when the library receives its first issue. When the institution receives subsequent issues/volumes of the periodical, the issues/volumes are checked in (often using a date stamp), added to the institution’s holding records, and made available very soon thereafter – normally within a few days of receipt or (at most) within a few weeks of receipt. The initial periodicals record will sometimes not reflect all subsequent changes in publication details (including minor variations in title, frequency, etc.).

24. As of 2003-2006, the timeframe I have been asked to investigate, a researcher would have been able to discover materials relevant to his or her topic in a variety of ways. One common means of discovery was to search for relevant information in an index of periodical and other publications, including through OCLC. Having found relevant material, the researcher would then normally obtain it online, look for it in libraries, or purchase it from the publisher, a bookstore, a

document delivery service, or other provider. Sometimes, the date of a document's public accessibility will involve both indexing and library date information. Date information for indexing entries is, however, often unavailable. This is especially true for online indices.

25. Indexing services have used a wide variety of controlled vocabularies to provide subject access and other means of discovering the content of documents. The formats in which these access terms are presented vary from service to service.

26. Online indexing services have commonly provided bibliographic information, abstracts, and full-text copies of the indexed publications, along with a list of the documents cited in the indexed publication. These services also often provide lists of publications that cite a given document. A citation of a document is additional evidence that the document was publicly available and in use by researchers no later than the publication date of the citing document.

27. **Wiley Online Library** – contains a full range of unrivaled journals, books, major reference works, and databases. Multidisciplinary collection of online resources covering life, health, and physical sciences; social science; and the humanities—850 scientific and scholarly societies around the world, and access to over 7.5 million articles from over 1,600 journals, over 21,000 online books, and hundreds of multi-volume reference works, databases, and other resources online.

<https://onlinelibrary.wiley.com/researchers>

28. **Wisconsin TechSearch (WTS)** – WTS is a set of services offered by the University of Wisconsin Libraries. WTS offers an array of article delivery and research services to any individual or organization who requests the specialized skills of WTS staff in locating and retrieving information, regardless of whether the individual is affiliated with the University of Wisconsin.<sup>4</sup>

#### **IV. OPINION REGARDING AUTHENTICITY AND PUBLIC ACCESSIBILITY**

29. I have been asked to opine on “An Integrated Poly-Si TFT Current Data Driver with a Data-line Pre-Charge Function” authored by M. Shimoda, et al. published in *Journal of the Society for Information Display* in its volume 11, issue number 3, 2003, pages 461-466 (“**Shimoda**”)

30. For consistency and clarification, Shimoda, when used in this declaration, refers not only to the Shimoda article but also the journal volume and issue in which it was published: *Journal of the Society for Information Display* in its volume 11, issue number 3, 2003.

##### **A. Authenticity**

31. I have been asked to review the version of Shimoda found in Exhibit 1004 and to analyze its authenticity.

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<sup>4</sup> <https://wts.wisc.edu/>

32. I have evaluated the authenticity of the Shimoda reference in several ways:

- by assessing a download I made from *Wiley Online Library*, the publisher of Shimoda (**Ex. 1004**);
- by assessing scans of a print copy of Shimoda provided to me at my request on December 28, 2021 by the Wisconsin TechSearch (WTS) of the copy of Shimoda owned by the Linda Hall Library (**Ex. 1020**); and
- by assessing scans of a print copy of Shimoda, Attachment A-3, provided to me at my request on December 28, 2021 by Wisconsin TechSearch (WTS) of the copy of Shimoda owned by the United States Library of Congress (**Ex. 1021**).

33. As stated above, I accessed and downloaded Exhibit 1004 from the *Wiley Online Library* database by my emeritus faculty status through Purdue University Libraries at this URL:<sup>5</sup>

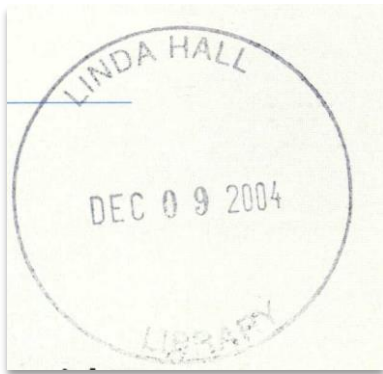
34. Exhibit 1020 was provided to me at my request on December 28, 2021, by Wisconsin TechSearch of the print copy of Shimoda owned by the Linda Hall Library. Exhibit 1020 includes scans of Shimoda: issue cover, *Journal of the Society for Information Display* in its volume 11, issue number 3, 2003 with a stamp that

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<sup>5</sup> <https://sid-onlinelibrary-wiley-com.ezproxy.lib.purdue.edu/doi/abs/10.1889/1.1821286?sid=vendor%3Adatabase>



reads “LINDA HALL DEC 09 2004 LIBRARY” as reproduced below; journal information page; table of contents with a stamp that reads “LINDA HALL DEC 09 2004 LIBRARY” as reproduced below; and the Shimoda article on pages 461-466.



The figure on the left is the date stamp from the issue cover, and the figure on the right is the date stamp from the table of contents of Exhibit 1020. All identifying characteristics, such as stamps and notations on Exhibit 1020, are consistent with library practice and procedure that I have observed during my career as a professional librarian, specifically when reviewing scans from the collections of the Linda Hall Library. I have no cause for concern about the authenticity or accuracy of these identifying attributes. Exhibit 1020 was found within the custody of a library, the Linda Hall Library, one of the most likely locations for an authentic document to be publicly accessible.

35. Exhibit 1021 was provided to me at my request on December 28, 2021, by Wisconsin TechSearch (WTS) of the print copy of Shimoda owned by the Library

of Congress. Exhibit 1021 includes scans of Shimoda: front and back cover and spine of the bound volume of the *Journal of the Society for Information Display*, [11] 2003 with a printed call number that reads “TK5103.5 .N34 Set 1”; issue cover, *Journal of the Society for Information Display* in its volume 11, issue number 3, 2003; journal information page; table of contents with a stamp that reads “LIBRARY OF CONGRESS JUN 15 2005” as reproduced below; and the Shimoda article on pages 461-466.



All identifying characteristics, such as stamps and notations on Exhibit 1021 are consistent with library practice and procedure that I have observed during my career as a professional librarian, specifically when reviewing scans from the collections of the Library of Congress. I have no cause for concern about the authenticity or accuracy of these identifying attributes. Exhibit 1021 was found within the custody of a library, the Library of Congress, one of the most likely locations for an authentic document to be publicly accessible.

36. I conclude, based on finding print copies of Shimoda in research libraries (Linda Hall Library and the Library of Congress) and online through a

reputable, publisher database (*Wiley Online Library*) that Exhibit 1004, Exhibit 1020, and Exhibit 1021 are each authentic, true, and correct copies of Shimoda. Each of Exhibit 1004, Exhibit 1020, and Exhibit 1021 are authentic, true, and correct documents.

**B. Public Accessibility**

**1. Evidence of Public Accessibility Through Print Copies in Libraries**

37. Exhibit 1022 is a true and correct copy of the *WorldCat* entry for Shimoda, *Journal of the Society for Information Display* as a serial publication. Shimoda was included among the papers published in the *Journal of the Society for Information Display* in its volume 11, issue number 3, 2003.

38. I obtained Exhibit 1022 by completing a search on *WorldCat* on January 3, 2022, for *Journal of the Society for Information Display*. The document cataloged in this record is a periodical record for *Journal of the Society for Information* as verified by title: *Journal of the Society for Information Display*; and publisher: Society for Information Display CA.

39. When I searched this *WorldCat* record for holdings of *Journal of the Society for Information Display* in Missouri, the Linda Hall Library was third on the list among the 436 libraries worldwide that held the *Journal of the Society for Information Display*. See Exhibit 1022. When I searched this *WorldCat* record for holdings of *Journal of the Society for Information Display* in the District of

Columbia, the Library of Congress was first on the list among the 436 libraries worldwide that held the *Journal of the Society for Information Display*. See Exhibit 1023.

40. *WorldCat* was accessible by a researcher to locate *Journal of the Society for Information Display* by title: *Journal of the Society for Information Display*; and by subject headings: *Information display systems – Periodicals*; and/or *Information Display Systems*. The searches discussed above could have been completed anywhere in the world by a researcher who had access to *WorldCat* and its predecessor database through an OCLC member library in 2003/2004 through ‘open access’ freely available to all.

41. In the 2003 to 2006 timeframe, research libraries regularly maintained records in the course of library operation. One such regularly-maintained record was OPAC entries.

42. Exhibit 1024 is a download I made from the Linda Hall Library OPAC (online catalog) on January 3, 2022. The document cataloged in this OPAC periodical record is for *Journal of the Society for Information Display* as verified by title: *Journal of the Society for Information Display*; publisher and publication date: Society for Information Display CA. v. 1993 -. The “1993-“ indicates an “open entry,” that is, a serial that started in 1993 and continues with subsequent issue. The holdings record at the Linda Hall Library reads:

#### LOCATION ITEMS

Linda Hall Library

Available , Closed Stacks - Serials Journal of the Society for Information Display.

Holdings: v.1(1993),v.2:no.2,4(1994),...

Shimoda could have been located in 2004 by searching on the Linda Hall Library OPAC (online catalog) for the title: *Journal of the Society for Information Display*; and/or by searching the subject heading: *Information display systems – Periodicals*.

43. Exhibit 1025 is a download I made from the Library of Congress OPAC (online catalog) on January 3, 2022. The document cataloged in this record is *Journal of the Society for Information Display* verified by the fields listing main title: *Journal of the Society for Information Display*; publisher and publication date: Society for Information Display, 1993-. The “1993-“ indicates an “open entry,” that is, a serial that started in 1993 and continues with subsequent issue. The holdings record at the Library of Congress reads:

CALL NUMBER	TK5103.5 .N34 Set 1
Request in	Jefferson or Adams Building Reading Rooms
Status	c.1 v. 24, no. 7/9-10/12 2016 July/Sept-July/Dec In Process 10-12-2018
Older receipts	v.1:no.1 (1993), v.1:no.4 (1993), v.2:no.2 (1994), v.3:no.4 (1995), v.4-v.7 (1996-1999), v.8:no.2-v.9:no.2 (2000-2001), v.10-v.12 (2002-2004), v.15:issue 4/6-v.19:issue 1/3 (2007:Apr./June-2011:Jan./Mar.), v.22:no.1/3-v.27:no.7/9 (2014:Jan./Mar.-2019:July/Sept.)
CALL NUMBER	TK5103.5 .N34 Copy 1 Unbound issues

Shimoda could have been located in 2005 in the Library of Congress OPAC by searching for the title: *Journal of the Society for Information Display*; or by searching the subject heading: *Information display systems – Periodicals*; and/or *Information display systems*. Evidence that Library of Congress owns this issue of *Journal of the Society for Information Display* is found in the field titled “Older receipts” as shown above.

44. The date stamp on Exhibit 1020 indicates receipt of Shimoda on December 9, 2004 by the Linda Hall Library. From my experience, a typical amount of time to process a journal article such as volume 11, issue number 3, 2003 of the *Journal of the Society for Information Display*, and transfer to the shelves and make accessible to a researcher is a week to 10 days. Therefore, Shimoda would have been publicly accessible no later than December 19, 2004 at the Linda Hall Library.

45. The date stamp on Exhibit 1021 indicates receipt of Shimoda on June 15, 2005 by the Library of Congress. From my experience, a typical amount of time to process a journal article such as volume 11, issue number 3, 2003 of the *Journal of the Society for Information Display*, and for transfer to the shelves and make accessible to a researcher is a week to 10 days. Therefore, Shimoda would have been publicly accessible no later than June 25, 2005 at the Library of Congress.

46. Thus, in my opinion, Shimoda would have been publicly available by December 19, 2004 at the Linda Hall Library and June 25, 2005 at the Library of Congress.

## 2. Other Evidence of Public Accessibility

47. I understand that there are other manners to prove public accessibility, such as by showing that Shimoda was actually cited in papers presented at a conference or articles published in research journals. This supports public availability as it shows that other researchers had, in fact, accessed Shimoda. To ascertain whether others had cited Shimoda, I performed a search on Google Scholar. Below are two such citations to Shimoda.

48. Exhibit 1026 (“**Sanford**”) is an article by James L. Sanford and Frank R. Libsch, titled “ $V_t$  Compensated Voltage-data a-Si TFT AMOLED Pixel Circuits,” published in *Journal of the Society of Information Display*, volume 12, issue 1, 2004, on pages 65-73. I downloaded Exhibit 1026 on January 3, 2022, by my emeritus faculty status at Purdue University. In the “References” section, Sanford cites Shimoda as reference number 24, as shown below:

24 M Shimoda, K Abe, H Haga, H Asda, K Hayama, K Iguchi, D Iga, H Imura, and S Miayano, “An integrated poly-Si TFT current data driver with a data-line precharge function,” *J SID* 11/3, 461–466 (2003).

49. Exhibit 1027 (“**Son**”) is an article by Son, Y.-S et al., titled “P40: A Novel Data Driving Method and Circuits for AMOLED Displays,” SID Symposium

Digest of Technical Papers, volume 37, 2006, on pages 343-346. I downloaded Exhibit 1027 on January 3, 2022, by my emeritus faculty status at Purdue University. In the “References” section, Son cites Shimoda as reference number [6], as shown below:

[6] M. Shimoda, K. Abe, H. Haga, H. Asada, H. Hayama, K. Iguchi, D. Iga, H. Imura, and S. Miyano, “An integrated poly-Si TFT current data driver with a data-line pre-charge function,” *Journal of the SID*, 2003, pp. 461-466

50. Thus, in my opinion, further evidence of the public availability of Shimoda includes other researchers citing Shimoda in 2004 (Sanford) and in 2006 (Son).

### **C. Conclusion**

51. I conclude that the copy of Shimoda found in Exhibit 1004, Exhibit 1021, and Exhibit 1022 are each an authentic, true, and correct document and would have been publicly accessible by December 19, 2004 (through the Linda Hall Library) and June 25, 2005 (through the Library of Congress).

52. Further evidence of public access to Shimoda are two citations: Sanford and Son. Sanford (Exhibit 1026) cited Shimoda in 2004, and Son (Exhibit 1027) cited Shimoda in 2006.



## **V. RIGHT TO SUPPLEMENT**

53. I reserve the right to supplement my opinions in the future to respond to any arguments that are raised and to take into account new information as it becomes available to me.

## **VI. JURAT**

54. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the full knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the U.S. Code.

Dated:

January 15, 2022

James L. Mullins

James L. Mullins, PhD

# APPENDIX A

# **JAMES L. MULLINS, PhD**

**Prior Art Documentation Librarian Services, LLC**

**205 Saint Cuthbert, Williamsburg, VA 23188**

**jlmullins@priorartdoclib.com**

**ph. 765 479 4956**

**Prior Art Documentation Librarian Services, LLC. (PADLS). Founded January 2018. As of January, 2022, 89 declarations have been completed for 32 law firms; four depositions scheduled, three cancelled a few days prior, and one was held, and was successful for my client.**

## **Library Experience:**

**2018-present Dean Emeritus of Libraries and Esther Ellis Norton Professor Emeritus**

**2011 - 2017 Dean of Libraries & Esther Ellis Norton Professor**

**2004 - 2011 Dean of Libraries & Professor, Purdue University, West Lafayette, IN**

**2000-2004 Assistant/Associate Director for Administration, MIT Libraries,  
Massachusetts Institute of Technology, Cambridge, MA.**

**1996-2000 University Librarian & Director, Falvey Memorial Library. Villanova University,  
Villanova, PA.**

**1978-1996 Director of Library Services, Indiana University South Bend.**

**1974-1978 Associate Librarian, Indiana University Bloomington, School of Law.**

**1973-1974 Instructor/Catalog Librarian. Georgia Southern College (now University).**

## **Teaching Experience:**

**1977-1996 Associate Professor (part-time), School of Library and Information Science, Indiana University. Subjects taught: Cataloging, Management, and Academic Librarianship.**

## **Education:**

**The University of Iowa. Honors Bachelor of Arts in History, Religion and Political Science.**

**The University of Iowa. Master of Arts in Library Science.**

**Indiana University. Doctor of Philosophy. Concentration: Academic Library Administration.**

**Emphasis: Law Librarianship.**

## **Awards and Recognition:**

2017 Wilmeth Active Learning Center/Library of Engineering and Science, Grand Reading Room, was announced by President Mitch Daniels, Purdue University, that it would be re-named the James L. Mullins Reading Room to honor his leadership and reputation in the academic library profession. September 2017. Portrait unveiled December 2017.

2017 Distinguished Alumnus Award by the School of Informatics and Computing, Indiana University, Bloomington. Given June 25, 2017.

2016 Hugh C. Atkinson Memorial Award, jointly sponsored by the four divisions of the American Library Association (ALA), June 27, 2016.

2015 ACRL Excellence in University Libraries Award, April 23, 2015.

Named Esther Ellis Norton Professor of Library Science by Purdue Trustees, December 11, 2011.

International Review Panel to evaluate the University of Pretoria Library, February 20 – 24, 2011. Pretoria, South Africa.

## **Publications: (selected)**

A Purdue Icon: creation, life, and legacy, edited by James L. Mullins, Founder's Series, Purdue University Press, 138pp., August 2017.

"The policy and institutional framework." In *Research Data Management, Practical Strategies for Information Professionals*, edited by Ray, J M. Purdue University Press, pp.25-44, 2014.

"DataCite: linking research to data sets and content." In Benson, P and Silver, S. *What Editors Want: An Author's Guide to Scientific Journal Publishing*. University of Chicago Press, pp. 21-23, December 2012.

"Library Publishing Services: Strategies for Success," with R. Crow, O. Ivins, A. Mower, C. Murray-Rust, J. Ogburn, D Nesdill, M. Newton, J. Speer, C. Watkinson. *Scholarly Publishing and Academic Resources Coalition (SPARC)*, version 2.0, March 2012.

"The Changing Definition and Role of Collections and Services in the University Research Library." *Indiana Libraries*, Vol 31, Number 1 (2012), pp.18-24.

"Are MLS Graduates Being Prepared for the Changing and Emerging Roles that Librarians must now assume within Research Libraries?" *Journal of Library Administration*. Volume 52, Issue 1, 2012, p. 124-132

Baykoucheva, Svetla. What Do Libraries Have to Do with e-Science?: An Interview with James L. Mullins, Dean of Purdue University Libraries. *Chem. Inf. Bull.* [Online] 2011, 63 (1), 45-49.

<http://www.acscinf.org/publications/bulletin/63-1/mullins.php> (accessed Mar 16, 2011).

“The Challenges of e-Science Data-set Management and Scholarly Communication for Domain Sciences and Technology: a Role for Academic Libraries and Librarians,” chapter in, *The Digital Deluge: Can Libraries Cope with e-Science?*” Deanna B. Marcum and Gerald George, editors, Libraries Unlimited/Teacher Ideas Press, 2009. (a monograph publication of the combined proceedings of the KIT/CLIR proceedings).

“Bringing Librarianship to e-Science,” *College and Research Libraries*. vol. 70, no. 3, May 2009, editorial.

“The Librarian’s Role in e-Science” *Joho Kanri (Journal on Information Processing and Management)*, Japan Science and Technology Agency (formerly Japan Information Center of Science and Technology), Tokyo, Japan. Translated into Japanese by Taeko Kato. March 2008.

*The Challenge of e-Science Data-set Management to Domain Sciences and Engineering: a Role for Academic Libraries and Librarians*, ” KIT (Kanazawa Institute of Technology)/CLIR (Council of Library and Information Resources) International Roundtable for Library and Information Science, July 5-6, 2007. Developments in e-science status quo and the challenge, The Japan Foundation, 2007.

“An Administrative Perspective,” Chapter 14, *Proven Strategies for Building an Information Literacy Program*, Susan Curzon and Lynn Lampert, editors, Neal-Schuman Publishers, Inc., New York, 2007. pp. 229-237.

*Library Management and Marketing in a Multicultural World*, proceedings of the IFLA Management and Marketing (M&M) Section, Shanghai, China, August 16-17, 2006, edited. K.G. Saur, Munchen, Germany, June 2007. 390 pp.

*Top Ten Assumptions for the Future of Academic Libraries and Librarians: a report from the ACRL Research Committee*, with Frank R. Allen and Jon R. Hufford. *College & Research Libraries*, April 2007, vol.68, no.4. pp.240-241, 246.

*To Stand the Test of Time: Long-term Stewardship of Digital Data Sets in Science and Engineering*. A report to the National Science Foundation from the ARL Workshop on New Collaborative Relationships: the Role of Academic Libraries in the Digital Data Universe. September 26-27, 2006, Arlington, VA. p.141. <http://www.arl.org/bm~doc/digdatarpt.pdf>

“Enabling Interaction and Quality in a Distributed Data DRIS,” *Enabling Interaction and Quality: Beyond the Hanseatic League*. 8<sup>th</sup> International Conference on Current Research Information Systems, with D. Scott Brandt and Michael Witt. Promoted by euro CRIS. Leuven University Press, 2006. pp.55-62. Editors: Anne Garns Steine Asserson and Eduard J. Simons.

"Standards for College Libraries, the final version approved January 2000," prepared by the ACRL College Libraries Standards Committee (member), *C&RL News*, March 2000, p.175-182.

"Standards for College Libraries: a draft," prepared by the ACRL College Libraries Section, Standards Committee (member), *C&RL News*, May 1999, p. 375-381.

"Statistical Measures of Usage of Web-based Resources," *The Serials Librarian*, vol. 36, no. 1-2 (1999) p. 207-10.

"An Opportunity: Cooperation between the Library and Computer Services," in *Building Partnerships: Computing and Library Professionals*. Edited by Anne G. Lipow and Sheila D. Creth. Berkeley and San Carlos, CA, Library Solutions Press, 1995. p. 69-70.

"Faculty Status of Librarians: A Comparative Study of Two Universities in the United Kingdom and How They Compare to the Association of College and Research Libraries Standards, " in *Academic Librarianship, Past, Present, and Future: a Festschrift in Honor of David Kaser*. Englewood, Colorado; Libraries Unlimited, 1989. p. 67-78. Review in: *College & Research Libraries*, vol. 51, no. 6. November 1990, p. 573-574.

### **Presentations: (Representative)**

“How Long the Odyssey? Transitioning the Library and Librarians to Meet the Needs and Expectations of the 21<sup>st</sup> Century University,” David Kaser Lecture, School of Informatics & Computing, Indiana University, Bloomington, IN, November 16, 2015.

Presentation at University of Cape Town, Cape Town, South Africa, August 20, 2015.

“The Challenge of Discovering Science and Technology Information,” Moderator, International Federation of Library Associations (IFLA) Science and Technological Libraries Section Program, Cape Town, South Africa, August 18, 2015.

“An Odyssey in Data Management: Purdue University,” International Federation of Library Associations (IFLA) Research Data Management: Finding Our Role – A program of the Research Data Alliance, Cape Town, South Africa, August 17, 2015.

Presentation at University of Pretoria, Pretoria, South Africa, August 11, 2015.

Co-Convener with Sarah Thomas, Harvard University, at the Harvard Purdue Symposium on Data Management, Harvard University, Cambridge, MA, June 15-18, 2015.

“Strategic Communication,” panel discussion on the Director's role and perspective on library communications at Committee on Institutional Cooperation (CIC) Center for Library Initiatives (CLI) Annual Conference, University of Illinois Urbana-Champaign, May 20, 2015.

“Issues in Data Management,” panel discussion moderated by Catherine Woteki, United States Undersecretary for Research, Education & Economics at 20<sup>th</sup> Agriculture Network Information Collaborative (AgNIC) Annual Meeting in the National Agricultural Library, Beltsville, MD, May 6, 2015.

“Active learning/IMPACT & the Active Learning Center at Purdue University,” Florida Institute of Technology, Melbourne, FL, February 11, 2015.

“Science+art=creativity: libraries and the new collaborative thinking,” panel moderator, International Federation of Library Associations (IFLA) 80<sup>th</sup> General Conference and Assembly, Lyon, France, August 19, 2014.

“Purdue University The Active Learning Center—A new concept for a library,” Association of University Architects 59<sup>th</sup> Annual National Conference, University of Notre Dame, South Bend, IN, June 23, 2014.

“Big Data & Implications for Academic Libraries,” keynote speaker, Greater Western Library Alliance (GWLA) Cyber-infrastructure Conference, Kansas City, MO, May 28, 2014.

“Research Infrastructure,” panel moderator, Association of Research Libraries (ARL) 164<sup>th</sup> Membership Meeting, Ohio State University, Columbus, OH, May 7, 2014.

“An Eight Year Odyssey in Data Management: Purdue University,” International Association of Scientific and Technological University Libraries (IATUL) 2013 Workshop Research Data Management: Finding Our Role, University of Oxford, UK, December 2013.

“Purdue University Libraries & Press: from collaboration to integration,” Ithaka Sustainable Scholarship, The Evolving Digital Landscape: New Roles and Responsibilities in Higher Education, libraries as publishers, New York, New York, October 2013.

“Tsinghua and Purdue: Research Libraries for the 21<sup>st</sup> Century,” Tsinghua University, Tsinghua, China, August 2013.

“Purdue Publishing Experience in the Libraries Publishing Coalition,” Association of American University Presses Annual Meeting, Press-Library Coalition Panel, Boston, Massachusetts, June 21, 2013.

“Indiana University Librarians Day: Purdue University Libraries Ready for the 21<sup>st</sup> Century,” Indiana University Purdue University Indianapolis (IUPUI), June 7, 2013.

“Purdue University Libraries and Open Access; CNI Project Update,” Coalition for Networked Information, San Antonio, TX, April 5, 2013.

Memorial Resolution, honoring Joseph Brannon, to the Board of the Association of College & Research Libraries, Seattle, WA, January 2013.

“An overview of sustaining e-Science collaboration in an Academic Research Library—the Purdue experience,” Duraspace e-Science Institute webcast, October 17, 2012.

“The Role of Libraries in Data Curation, Access, and Preservation: an International Perspective,” Panel Moderator, 78<sup>th</sup> General Conference and Assembly, International Federation of Library Associations, Helsinki, Finland, August 15, 2012.

“21<sup>st</sup> Century Libraries,” moderator of First Plenary Session, International Association of Technological University Libraries 33<sup>rd</sup> Annual Conference, Singapore, June 4, 2012.

“Planning for New Buildings on Campus,” panel presenter, University of Calgary Building Symposium on Designing Libraries for the 21<sup>st</sup> Century, Calgary, Alberta, Canada, May 17, 2012.

“Data Management and e-Science, the Purdue Response.” Wiley-Blackwell Executive Seminar-2012, Washington, DC, March 23, 2012.

“An overview of Sustaining e-Science Collaboration in Academic Research Libraries and the Purdue Experience.” Leadership & Career Development Program Institute, Association of Research Libraries (ARL). Houston, TX, March 21, 2012.

“An overview of Data Activities at Purdue University in response to Data Management Requirements.” Coalition for Academic Scientific Computation (CASC). Arlington, VA, September 8, 2011.

“Getting on Track with Tenure,” Association of College and Research Libraries (ACRL) Research Program Committee. Washington, DC, June 26, 2011.

“Integration of the Press and Libraries Collaboration to Promote Scholarly Communication,” Association of Library Collections & Technical Services (ALCTS) Scholarly Communication Interest Group – American Library Association, New Orleans, Louisiana, June 25, 2011.



“Cooperation for improving access to scholarly communication,” with N. Lossau (Germany), C. Mazurek (Poland), J. Stokker (Australia), panel moderator and presenter, Second Plenary Session, International Association of Scientific and Technological University Libraries (IATUL) 32<sup>nd</sup> Conference 2011, Warsaw, Poland. May 29-June 2, 2011.

“Riding the Wave of Data,” STM Annual Spring Conference 2011. Trailblazing & transforming scholarly publishing 2011. Washington, D.C., April 28, 2011.

“Confronting old assumptions to assume new roles: physical and operational integration of the Press and Libraries at Purdue University,” keynote speaker, 2011 BioOne Publishers & Partners Meeting. Washington, D. C., April 22, 2011.

“Are MLS Graduates Being Prepared for the Changing and Emerging Roles that Librarians must now assume within Research Libraries?” University of Oklahoma Libraries Seminar, March 4, 2011, Oklahoma City, Oklahoma.

“The Future Role of University Librarians,” the University of Cape Town, South Africa, February 25, 2011.

“New Roles for Librarians: the Application of Library Science to Scientific/Technical Research – Purdue University – a case study. International Council for Science and Technology (ICSTI); Ottawa, Canada. June 9, 2009.

“Reinventing Science Librarianship: Models for the Future,” Association of Research Libraries / Coalition for Networked Information. October 16-17<sup>th</sup>, 2008, Arlington, VA. Moderator and convener of Data Curation: Issues and Challenges.

“Practical Implementation and Opportunities Created at Purdue University,” African Digital Curation Conference, Pretoria, South Africa, (live video transmission), February 12, 2008.

Keynote speaker. “*Scholarly Communication & Academe: The Winter of Our Discontent*,” XXVII Charleston Conference on Issues in Book and Serial Acquisition, Charleston, South Carolina. November 8, 2007.

Keynote speaker. “*Enabling Access to Scientific & Technical Data-sets in e-Science: a role for Library and Archival Sciences*,” Greater Western Library Alliance (GWLA), Tucson, Arizona. September 17, 2007. A meeting of library directors and vice presidents for research of member institutions.

“*The Challenge of e-Science Data-set Management to Domain Sciences and Engineering: a Role for Academic Libraries and Librarians*,” KIT (Kanazawa Institute of Technology)/CLIR (Council of

Library and Information Resources) International Roundtable for Library and Information Science, July 5-6, 2007. Invited to participate by the Deputy Librarian of Congress.

International Association of Technological University Libraries (IATUL), Stockholm, Sweden. June 8, 2007. Invited paper, *Enabling International Access to Scientific Data-sets: creation of the Distributed Data Curation Center (D2C2)*.

“A New Collaboration for Librarians: The Principles of Library and Archival Sciences Applied to the Curation of Datasets,” Symposium of the Libraries and the College of Engineering, University of Louisville, April 6, 2007.

“Purdue University Libraries: Through Pre-eminent Innovation and Creativity, Meeting the Challenges of the Information Age,” Board of Trustees, Purdue University, February 15, 2007.

ARL Workshop on New Collaborative Relationships: The Role of Academic Libraries in the Digital Data Universe, September 26-27, 2006, Arlington, VA. Invited participant.

NARA and SDSC: A partnership. A panel before the National Science Foundation, June 27, 2006. Arlington, VA. Invited participant.

“Kaleidoscope of Scientific Literacy: fusing new connections,” with Diane Rein, American Library Association, Association of College and Research Libraries, Science & Technology Section, Annual Conference, New Orleans, June 26<sup>th</sup>, 2006.

“Leadership for Learning: Building a Culture of Teaching in Academic Libraries – an administrative perspective,” American Library Association, Association of College and Research Libraries, Instruction Section, Annual Conference, New Orleans, June 25<sup>th</sup>, 2006.

“Building an interdisciplinary research program in an academic library:

how the Libraries’ associate dean for research makes a difference at Purdue University,” International Association of Technological University Libraries (IATUL), Porto, Portugal, May 23rd, 2006.

“Enabling Interaction and Quality in a Distributed Data DRIS,” *Enabling Interaction and Quality: Beyond the Hanseatic League*. 8<sup>th</sup> International Conference on Current Research Information Systems, with D. Scott Brandt and Michael Witt. Promoted by euro CRIS, Bergen, Norway, May 12th, 2006, Brandt, and Witt presented in person

“Interdisciplinary Research,” with D. Scott Brandt, Coalition for Networked Information (CNI) Spring Meeting: Project Briefing, Washington, D.C., April 3<sup>rd</sup>, 2006.

“An Interview with Purdue’s James Mullins,” a podcast submitted by Matt Pasiewicz, on *Educause Connect*, [http://connect.educause.edu/James\\_L\\_Mullins\\_Interview\\_CNI\\_2005](http://connect.educause.edu/James_L_Mullins_Interview_CNI_2005)

“Managing Long-Lived Digital Data-sets and their Curation: Interdisciplinary Policy Issues,” Managing Digital Assets Forum, Association of Research Libraries (ARL), Washington, D.C., October 28<sup>th</sup>, 2005.

“The Odyssey of a Librarian.” Indiana Library Federation (ILF), District 2 Meeting, South Bend, Indiana. October 4th, 2005.

"New College Library Standards," Standards Committee Presentation, ALA, Chicago, July 7, 2000.  
SUNY Library Directors, Lake George, New York. *“The College Library Standards: a Tool for Assessment.”* April 5, 2000.

Tri-State College Library Association, *Finding You Have Talents You Never Knew You Had*, Penn State Great Valley, March 25, 2000.

*Using Web Statistics*, American Library Association, New Orleans, June 24, 1999.

Keynote speaker at the JSTOR Workshop, January 29, 30, 1999. University of Pennsylvania, Philadelphia, PA.

"The New Standards for Electronic Resources Statistics," Society of Scholarly Publishers, Washington, D.C., September 17, 1998.

"Evaluating Online Resources: Now that you've got them what do you do?," joint presenter with Chuck Hamaker, LSU, at the NASIG Conference, Boulder, Colorado. June 1998.

"What Employers Are Looking for in New Librarians?" Pennsylvania Library Association, Philadelphia. September 26, 1997.

"The Theory of Matrix Management" panel presentation of the Comparative Library Organization Committee of the Library Organization and Management Section of the Library Administration and Management Association, a division of the American Library Association, Annual Meeting, Chicago, June 24, 1990.

### **Professional Involvement: (summary of recent emphasis)**

The focus for my professional involvement and research has moved recently toward managing massive data-sets. This has resulted in working with faculty in the sciences and technology to determine how librarians can collaborate in managing, curating, and preserving data-sets for future access and documentation. This has included various speaking opportunities as well as participation in planning with the National Science Foundation (NSF) on ways in which librarians can be integrated more completely into the funded research process. Participation in the Kanazawa Institute of Technology/Council of Library Resources Roundtable was particularly rewarding and provided new opportunities to share with international colleagues the issues surrounding data-set management. I was

the champion for the creation of the Distributed Data Curation Center (D2C2) at Purdue University (<http://d2c2.lib.purdue.edu/>)

Throughout my career, beginning with my dissertation, I have been actively involved with assessing and evaluating libraries. In the fall of 1999, I contacted twenty-two academic library directors to determine whether the need was also felt by others. The response was overwhelmingly affirmative. This resulted in a meeting at ALA Midwinter, January 2000. A formal meeting followed at Villanova University in April 2000. As convener, I helped to form the University Libraries Group (ULG), modeled after the Oberlin Group for college libraries. The ULG is made up of university libraries that support diverse wide-ranging programs through doctoral level and have a level of support that places them in the top tier of academic institutions. A few of the member libraries, along with Villanova, are William and Mary, Wake Forest, Lehigh, Carnegie-Mellon, Tufts, Marquette, Miami of Ohio, and Southern Methodist. In 1994 appointed to the Standards Committee, College Section, Association of College and Research Libraries. During the next six years, the Committee concentrated on changing the focus of the standards from quantitative analysis of input and output factors to emphasis on assessment of the outcome.

Culmination of the work was a re-issue of the *Standards for College Libraries* in 2000. The knowledge gained through my work experience enabled me to formulate the changes needed in the standards. This work allowed for close collaboration with accrediting agencies, both professional and regional.

During this same time another focus emerged, the impact of digital resources. Through my work on the JSTOR Statistics Task Force, standards were developed on the collection of use of electronic databases. This Standard was later adopted in 1998 by the International Consortium of Library Consortia (ICOLC). In 2002, the American Library Association appointed me to serve as the liaison to the Marketing and Management Section of the International Federation of Library Associations (IFLA).

### **Professional Service: (representative list)**

Nominations Committee, Association of Research Libraries (ARL), 2016.

Steering Committee, Scholarly Publishing and Academic Resources Coalition (SPARC), 2016 – 2017.  
“Excellence in Library Services,” Chair, Review Team, University of Hong Kong, Hong Kong, August 24-27, 2015.

Chair, Management Advisory Board, 2015-2017; Member, Scientific Advisory Board, arXiv, Cornell University, 1/1/2013 – present.

Advisory Board for the Wayne State University School of Library and Information Science, July 2012 – present.

Advisory Board for Microsoft Academic Search, 2012 – 2015. Redmond, WA.

Transforming Research Libraries, a Strategic Direction Steering Committee of the Association of Research Libraries (ARL), 2012-2015.

Science and Technology section, representing ARL, International Federation of Library Associations (IFLA), Chair, 2013 – 2017; Member, 2011 to present.

Member of University of Pretoria, South Africa, Library Review Committee. August 2013.

Co-chair, Local Arrangements Planning Committee for 2013 Conference, Association of College and Research Libraries (ACRL), a division of the American Library Association (ALA).

Association of Research Libraries Leadership & Career Development Program Mentor, 2011-2017.

e-Science Task Force, Association of Research Libraries. July 2006 – present. Chair, October 2011 – October 2012.

Board of Directors, International Association of Technological University Libraries (IATUL). January 2008 – December 2014.

Midwest Collaborative for Library Services (MCLS); Board Member, October 2010 – December 2012.

Chair, Library Directors, Committee on Institutional Cooperation (CIC), July 2010 – June 2012.

Board of Directors, Association of Research Libraries (ARL); October 2008 – October 2011.

Scholarly Communication Steering Committee, Association of Research Libraries (ARL) 2008-2011.

Editorial Board, *College and Research Libraries*, Association of College and Research Libraries, American Library Association. January 2008 – December 2014.

Chair, Organizing Committee for IATUL Conference 2010, June 21-24, 2010, Purdue University, West Lafayette, Indiana/Chicago, Illinois.

Conference Planning Committee for National Conference of the Association of College and Research Libraries, 2009, Seattle, Washington.

Research Committee, Association of College and Research Libraries, ACRL, division of ALA. 2002-2007, chair, 2005-2007.

Association of Research Libraries, Search and Screen Committee, Executive Director. March – January 2008.

Center for Research Libraries, Board of Directors. April 2006 – April 2012.

Academic Libraries of Indiana, Board of Directors, 2004 – present. Vice-president, 2005-2007. President, 2007- 2009.

ALA Representative to the International Federation of Library Associations (IFLA), Marketing and Management (M&M) Section, initial term 2003-2007, re-appointed for second term, 2007-2011.

Invited to represent Research Libraries at the ACRL/3M Wonewok Retreat to assess Marketing of Academic Libraries, October 2002.

Hugh A. Atkinson Award Committee, LAMA Representative, ALA, 2001-2005.

Program Committee, Library Administrators and Management Association (LAMA), a division of ALA. 1996-2001.

ACRL, Standards and Accreditation Committee, a division of ALA. Liaison to RBMS Section of ACRL. 1997-2002.

Elected to the Executive Committee of LAMA, LOMS, a division of the American Library Association, 1998-2000. Nominated as Chair/Elect for 2003 – 2005.

Columbia University Press Advisory Committee. 1996 - 2000.

LITA/LAMA Conference Evaluation Committee, Pittsburgh, Pennsylvania, October 1996.

"New Learning Communities," Coalition for Networked Information, Indianapolis. November 19-21, 1995. Facilitator for invitational, national conference committed to developing collaborative learning and teaching techniques, involving librarians.

Planning Committee-Evaluation. LITA/LAMA 1996 Conference, Pittsburgh. This first conference, to be held jointly between two divisions of ALA, will focus on new technologies within libraries.

Indiana Cooperative Library Services Authority (InCoLSA), elected to Executive Committee, April 1991, served as President in 1993-94. InCoLSA is a statewide network of academic, public, school, and special libraries that supports library cooperation for cataloging, interlibrary loan, collection development and application of new technologies.

Governor's Conference on Libraries and Information Services. Served on Planning Committee, Academic Libraries Representative, appointed by the Governor to represent academic libraries in Indiana, Chair, Finance Committee, April 1989-July 1991.

Indiana Library Endowment Foundation Board, 1984-92. Charter Member, 1984, President, 1988-1992. 2004-2005.

### **University Service: (Summary)**

Served on search and screen committees for senior positions including chancellor, dean, and directors; most recently I have been asked to serve on the search committee for the provost of Purdue University. At MIT service included the Library Council & appointment to the Administrative Council by President

Vest, 2001-2003 & Member of the Faculty Committee on the Library System. At Purdue appointed by the President to the Search Committee for the Provost, October 2007 to May 2008; member of the Capital Projects Committee, and IT Operational Oversight Committee as senior academic dean, 2008-2014.

Global Council, Global Policy Institute, 2012 – 2016.

Academic Program Excellence and Rankings (APER) project team, 2014.

Representative of the Academic Deans on the Re-engineering Business Operations, Purdue University, 2016 –

Academic Deans Council chaired by Provost – 2004 – 2017.

University Promotion and Tenure Committee – 2006 – 2017.

"Outstanding Team Award, Electronic Reserve Project," served as Chair, recognition awarded by the President of Villanova University to one team who made an outstanding contribution to the operations of the University, selected by a committee of administrators, faculty, and staff. Awarded September 9, 1999.

Nominated for the IUSB Lundquist Award, 1995 & 1996. The Lundquist award is given to faculty who have "exhibited excellence in teaching, scholarly or artistic achievement, and diversified relevant service..."