

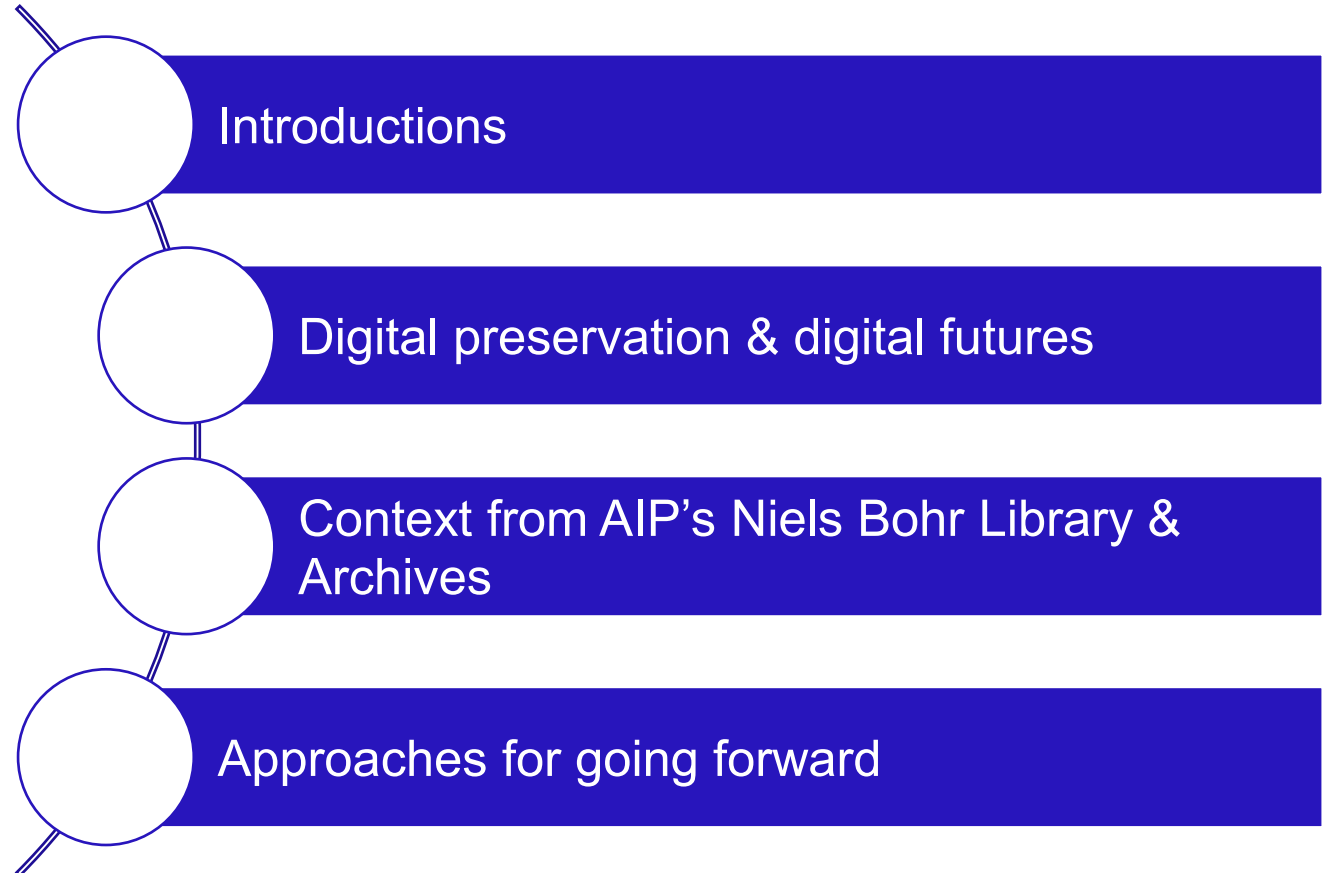
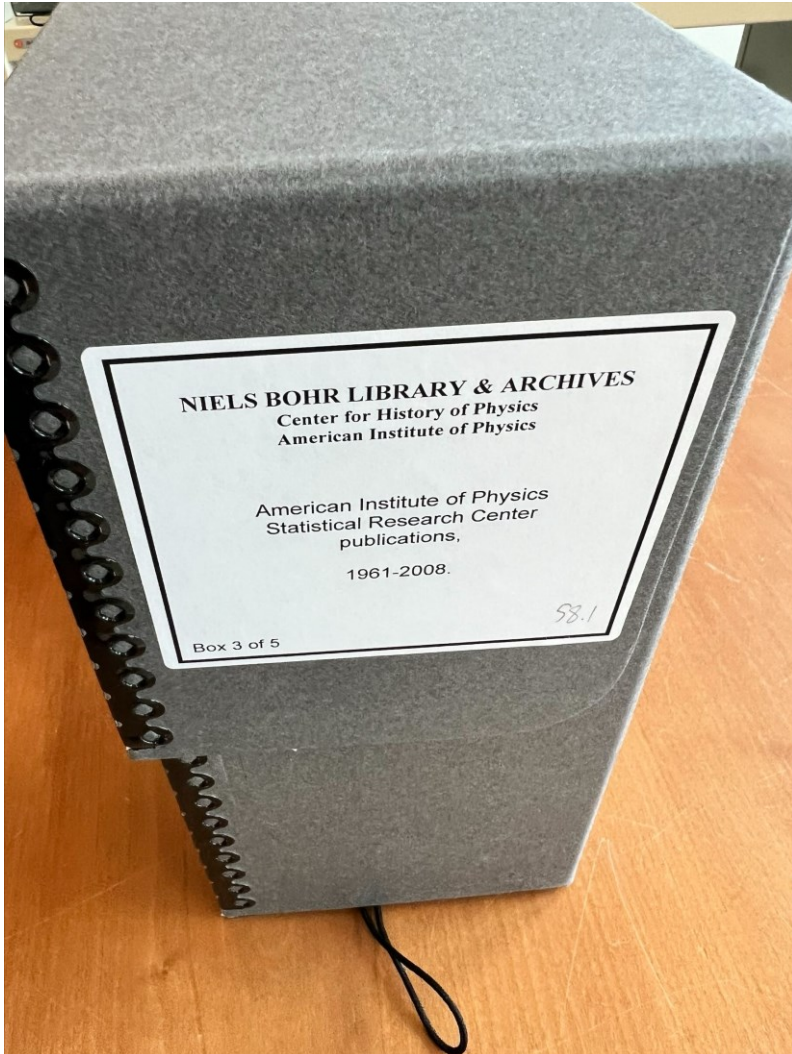


# Manifesting Sustainable & Durable Institutions With Digital Preservation at their Core

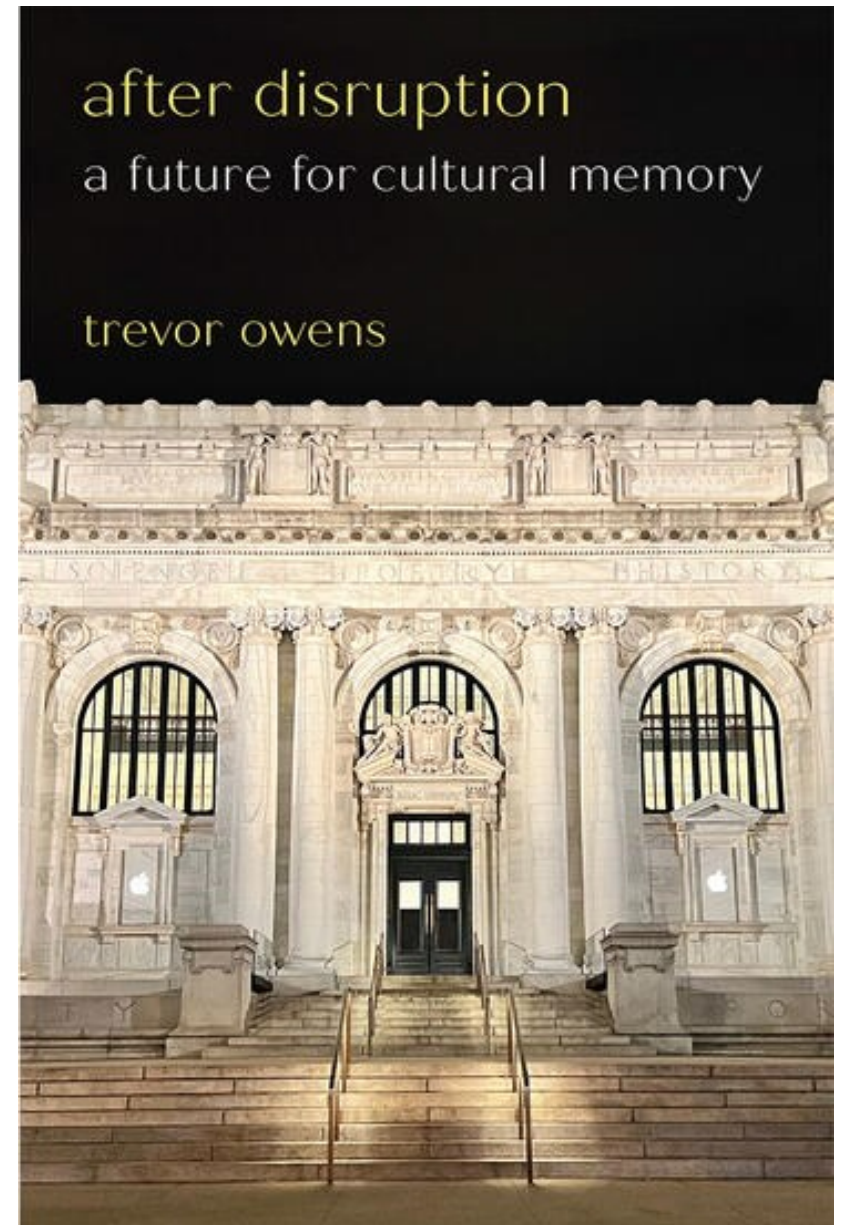
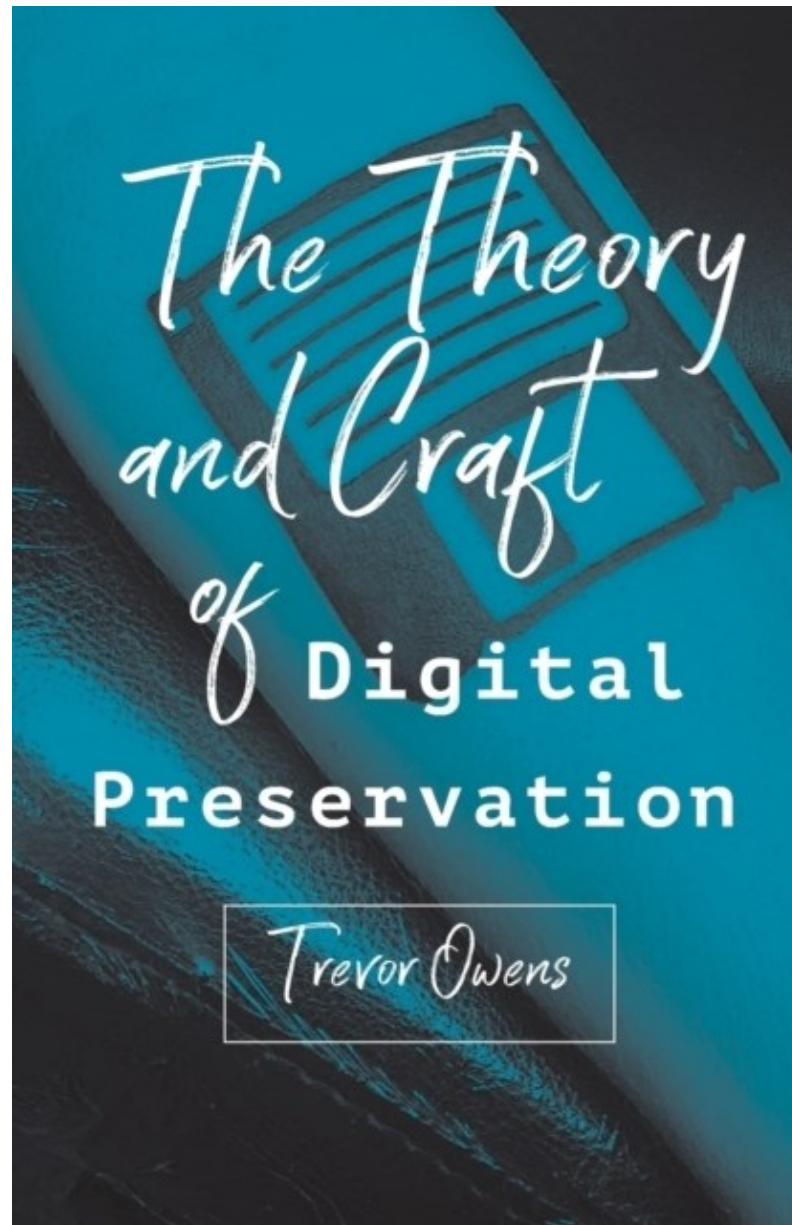
Trevor Owens

Chief Research Officer, AIP

# Talk Roadmap



**Digital preservation**  
as a core challenge  
for the future of  
library collections  
and services



LEAD

# What We Post Online Is Forever, and We Need a Reminder.

What you post is tied to you forever.



By **Meredith Fineman** *Founder, FinePoint* [@MeredithFineman](#)



# Scientists warn we may be creating a 'digital dark age'

Science Friday

January 01, 2018 · 11:30 PM EST

Writer **Adam Wernick**

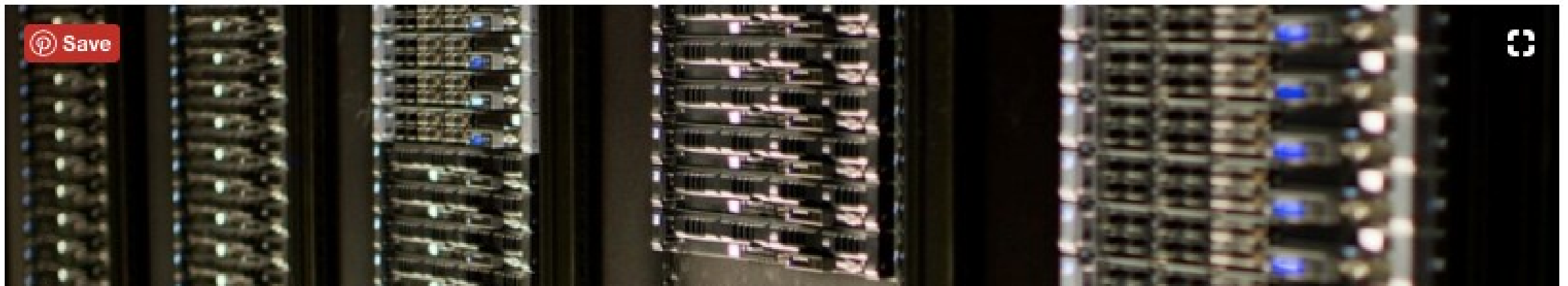
Producer **Christopher Intagliata**



Listen to the full interview.



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# book responses

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“Acknowledging that we are part of ‘a long-standing and **worldwide tradition of memory keepers**,’ Trevor Owens challenges us to use the lessons learned in traditional preservation as we approach digital preservation.” — *David S. Ferriero, Archivist of the United States, National Archives and Records Administration*

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“The Theory and Craft of Digital Preservation excels as an example of how to effectively suggest that a nascent professional field **correct its course** without utterly shunning its brief past.” — *Kyle Rimkus, Preservation Librarian and an Assistant Professor of Library Administration at the University of Illinois at Urbana-Champaign, in American Archivist*

# Selected Digital Preservation Axioms

# 1. A repository is not a piece of software

Software cannot preserve anything. Software cannot be a repository in itself. A repository is the sum of financial resources, hardware, staff time, and ongoing implementation of policies and planning to ensure long-term access to content. Any software system you use to enable you preserving and providing access to digital content is by necessity temporary. You need to be able to get your stuff out of it because it likely will not last forever. Similarly, there is no software that “does” digital preservation.

## 2. Institutions make preservation possible

Each of us will die. Without care and management, the things that mattered to us will persist for some period of time related to the durability of their mediums. With that noted, the primary enablers of preservation for the long term are our institutions (libraries, archives, museums, families, religious organizations, governments, etc.) As such, the possibility of preservation is enabled through the design and function of those institutions. Their org charts, hiring practices, funding, credibility, etc. are all key parts of the cultural machinery that makes preservation possible.

# 16. Doing digital preservation requires thinking like a futurist

We don't know the tools and systems that people will have and use in the future to access digital content. So if we want to ensure long term access to digital information we need to, at least on some level, be thinking about and aware of trends in the development of digital technologies. This is a key consideration for risk mitigation. Our preservation risks and threats are based on the technology stack we currently have and the stack we will have in the future so we need to look to the future in a way that we didn't need to with previous media and formats.

---

## Tools for Looking Forward

Digital preservation is not an exact science. It is a craft in which experts must reflexively deploy and refine their judgment to appraise digital content and implement strategies for minimizing risk of loss. At least, that is the case I have sought to make in this book.

The craft of digital preservation is anchored in the past. It builds off the records, files, and works of those who came before us and those who designed and set up the systems that enable the creation, transmission, and rendering of their work. At the same time, the craft of digital preservation is also the work of a futurist. We must look to the past trends in the ebb and flow of the development of digital media and hedge our bets on how digital technologies of the future will play out.

One of the most challenging aspects of writing practical things about digital tools and technologies is how the quick rate of technological change can make the work seem dated. I hope that in focusing on a way of approaching and making decisions about objects that this book can have a long shelf life. However, I understand that it's possible that significant shifts in underlying digital technologies



# TREVOR OWENS

User Centered Digital Memory

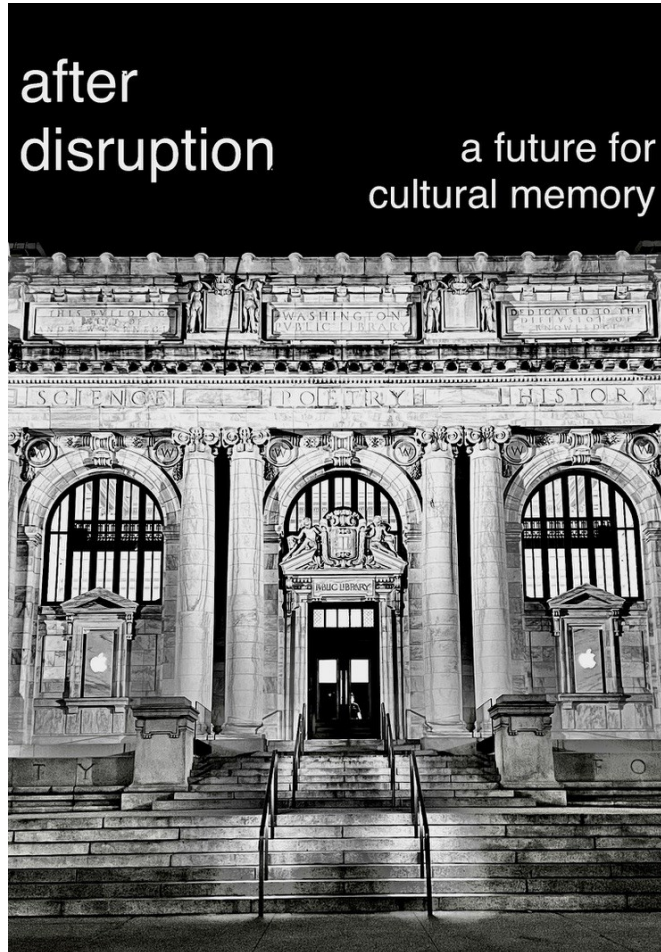
[Bio](#) [Vitae](#) [Writing](#) [Teaching](#) [Book](#)

NOVEMBER 11, 2021 BY TJOWENS

## After Disruption: A Future for Cultural Memory (My Next Book)

I'm excited to share that last weekend I signed the contract for my next book with [University of Michigan Press](#). Over the course of the next year I will be developing *After Disruption: A Future for Cultural Memory*. In this post I share an overview plan for the book and I'll be sharing drafts of it as I go. I'm looking forward to any comments or recommendations you might have about how I'm approaching this.

As I finished my last book, I've been thinking a lot more about the broader set of issues facing cultural memory institutions. The last chapter of [The Theory and Craft of Digital Preservation](#) shifts into thinking about the future and the wide range of challenges that the Anthropocene presents to preservation and this book will largely work as a further zooming out on some of those issues. To that end, this book also builds from some of what I was exploring in [the Stone Lecture I gave earlier this year](#). Along with that, I've been thinking a lot



## 1. Cultural Memory & the Future

### **Part One: Three Bankrupt Ideas**

2. What Disruption Wants
3. Where Data Drives
4. Why Memory Work Doesn't Work

### **Part Two: Three Ways Forward**

5. The Maintenance Mindset
6. Concentric Circles of Care
7. Repair, Revision, & Return
8. A Future for Cultural Memory

# American Institute of Physics

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## Trevor Owens Named as AIP's First Chief Research Officer

FEB 12, 2024



*Owens will lead the newly formed AIP Research team, bringing together decades of research capabilities to focus on cultivating and empowering positive change in the physical sciences.*



WASHINGTON, Feb. 12, 2024 – AIP is delighted to announce the appointment of Trevor Owens as its first Chief Research Officer. Starting Feb. 12, Owens will lead AIP Research, a core element of the Institute's strategic transformation enabling AIP to leverage its work in statistical research, history, policy, culture, and its library and archives to bring thought leadership to the wider community.

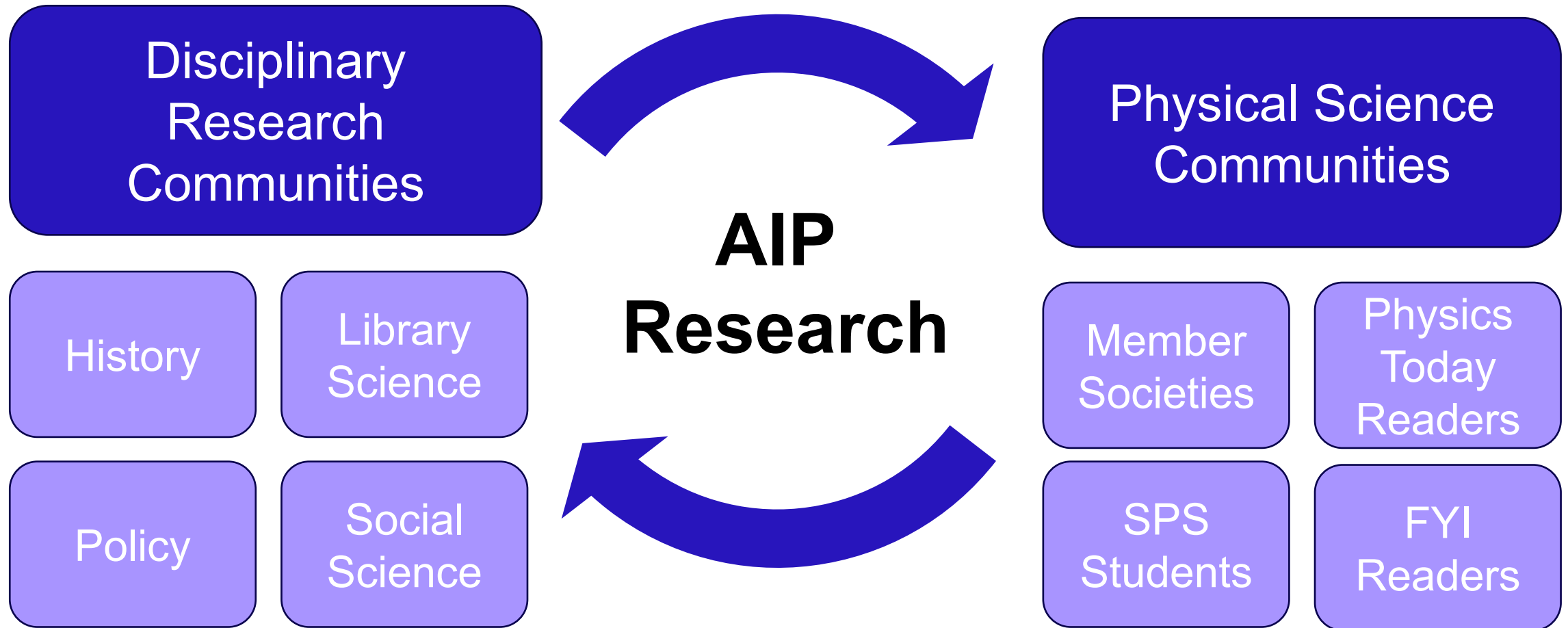
“Trevor has extensive experience and background in history of science research, library and archives leadership and management, deploying digital research tools, as well as applied social science research,” said [Michael Moloney](#), AIP CEO. “I am thrilled for him to join AIP to lead initiatives and spearhead research and analysis products to address important topics and effect positive change in the physical sciences enterprise.”



# AIP Research Capacities

	Connecting	Collecting	Creating	Curating
<b>History &amp; Policy</b>	Oral histories Lectures	Oral histories	Newsletter Web resources	
<b>Statistical Research</b>	Survey respondents Research clients	Survey data Focus group data	Reports Data interactives Data graphics	Research data management
<b>Library &amp; Archives</b>	Reference Services Collection donors Hosting visitors	Books Archives Visual material	Descriptive metadata ICOS Social media	Collection management Digital repository management

# Mobilizing AIP Research Capacities



# Thematic Areas of Focus



Supporting a **culture of inclusion & belonging** in the physical sciences



Advancing **equitable public policy** in the physical sciences



Ensuring **records of 20th & 21st century science are preserved & used**



Promoting **vibrant career trajectories** for physical science professionals



“The enterprises which are now under way and for which this room will **serve as hearth**, should make it possible, if there are serious students of the human predicament in the future, to know very much more about what has befallen us ...the **discoveries in the sciences** are among the **great epics**, and they should be available **in our tradition**...the undertakings of which this new library will be the home.”

*J. Robert Oppenheimer remarks at the opening of the American Institute of Physics' Niels Bohr Library and Archives in 1962*

Some example ways forward

# Oral History & Repair

## Ex Libris Universum

July 26, 2024

## The Power of Oral Histories

Kai Hostetter-Habib, SPS Intern

A DAY IN THE LIFE | ORAL HISTORIES | PHYSICS HISTORY |

I often believe that a common misconception about history is that it means studying the past and only the past. However, I find that the greatest impact occurs when we connect the past to the present. This is where oral histories come into play.

As my internship here at the Niels Bohr Library & Archives (NBLA) comes to a close, I wanted to tell you about my experiences with oral histories. As you may know, NBLA is home to over 1,500 oral history interviews with prominent physicists, including Niels Bohr, Richard Feynman, and Cecilia Payne-Gaposchkin. The more time you spend in the database, the more you discover. Yet, one glaring trend emerges: the majority of interviews are with White, straight, non-disabled men.

Dr. Jan J. Eldridge (she/they)



Jan J. Eldridge. Credit: Jan Eldridge, CC BY-NC-SA 4.0

Dr. K. Renee Horton (she/her)



K. Renee Horton at NASA's Michoud Assembly Facility. Credit: NASA, Public domain, via Wikimedia Commons

<https://www.aip.org/history-programs/niels-bohr-library/ex-libris-universum/power-oral-histories>

# Inviting Stories

**SHAKESPEARE GOT IT  
WRONG. IT'S NOT  
"TO BE", IT'S "TO DO"!**

**The Memoirs of a Geophysicist**

by

**Jack Oliver**

Irving Porter Church Professor Emeritus  
Cornell University  
Ithaca, New York 14853

Said the scientists taking a bow,  
"We've solved all the 'how' questions now.  
Next we will try,  
To answer one 'why',  
But we can't quite figure out how!"

## PREFACE

This autobiography was stimulated by a joint request from the Committee on the History of Geophysics of the American Geophysical Union and the Center for the History of Physics of the American Institute of Physics. Otherwise I might not have attempted it. For someone who throughout the bulk of his career and until its later stages confined his writing almost entirely to topics of science, writing about oneself calls for a change of style, and a change of focus that seems uncomfortably self-centered. I make this attempt therefore and to some degree as a consequence of urging by others. Yet it would be unfair if I did not also note that I hold the hope that somehow and somewhere in this document I will record, perhaps inadvertently, something that will be stimulating or useful to others, particularly to my descendants, to rising young scientists, and to those attempting to understand the way that science works and how science and scientists sometimes interact with other elements of society and life. What this book is decidedly not is a search for accolades or some sort of fame. I have already had enough of each. It is instead merely an attempt to pass on something from the past that may be of use and value to someone in the future.

If I had to describe my life's story in the fewest possible words (a course some readers might prefer!), I would probably choose the simple but overworked phrase "The American Dream". From the perspective of the 75-year old who experienced it, my life, in an overall sense, seems the kind of Horatio Alger "struggle to success" story that is said to, and very often does, characterize our American society. Born to parents of limited means and modest education in a small midwestern steel town, I experienced the hardships of growing up during

# Dick, Steven J. Stardust Memories: A Dick Family History and Memoir, 2019

Summary

Full Description

## Stardust Memories: A Dick Family History & Memoir

*Stardust thou art and unto Stardust Thou Shalt Return*

Steven J. Dick  
2019

### Stardust Memories



Figures 115-118. Top left clockwise: With Vice Presidents Gore (1999), Cheney (2002), and Quayle (1991), at Vice Presidential residence, U.S. Naval Observatory. Quayle was non-descript, Gore one of my favorites (he believed in science!), Cheney one of the worst in history, until the Trump-Pence catastrophe.

anniversary of the International Latitude Service. I served as the Chair of this meeting, with much help from the Time Service Department. It was held in Sardinia, Italy.

Meanwhile, more locally, I was Vice President (2001-2002) and President (2003-2004) of the Philosophical Society of Washington, which met in the very elegant Cosmos Club. The Society, one of the oldest in Washington dating back to the 1870s, sponsored weekly speakers on a variety of scientific topics of general interest, and open to the public. I met many interesting people as a result of this activity. My membership in the society dated back to millennium celebrations at the USNO.

# The Niels Bohr Library & Archives as...

- A **laboratory** for developing **belonging centered archival futures**
- A **personal memorial** to physical scientists
- A **cultivator** of a **legacy mindset** among scientists
- A **facilitator** of **intergenerational interdisciplinary dialog** between physical scientists and historians and social scientists
- A **trusted source** in an increasingly untrusting world



# Questions to consider

- Is it crystal clear how/why digital preservation is central to your organizations mission?
- How is your organization communicating the importance of work in digital preservation as part of it's mission to stakeholders?
- How can you work to get interests in your organization aligned to demonstrate the value/need for digital preservation in ways stakeholders find important to them?

