

Good afternoon, I'm Dorothy from the SLAC National Accelerator Laboratory.

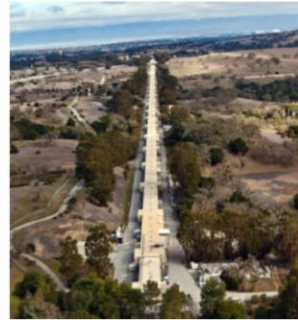
I'd like to present a case study of processing the papers of SLAC's first Director, Wolfgang K.H. Panofsky, affectionately known as "Pief".

This presentation could be considered part 3 of a series, with the first two given by Laura O'Hara in 2012 & 2013.

## SLAC National Accelerator Laboratory

SLAC

- Multi-purpose astrophysics, photon science, accelerator & particle physics research facility (1 of 17 U.S. DOE National Labs)
- Established in 1962 in Menlo Park, CA
- 140 buildings on a 426-acre site operated by Stanford University
- 4 Nobel prizes awarded for research here
- World's longest particle accelerator (2 miles)
- 1<sup>st</sup> website in North America



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SLAC is a multipurpose research facility, with a history of transformation—reinventing itself from a foundation of high energy physics and merely housing a linear accelerator—albeit the longest in the world.

Photos Credit: SLAC Communications Dept.



**Mission: Service**

- **FIND AND APPRAISE**
- **ORGANIZE AND PRESERVE**
- **ASSIST** researchers
- **PROVIDE INTELLECTUAL CAPITAL**

to support SLAC's current and future activities

<http://www.slac.stanford.edu/history/>

Credit: Jean M. Deken, 2010 3

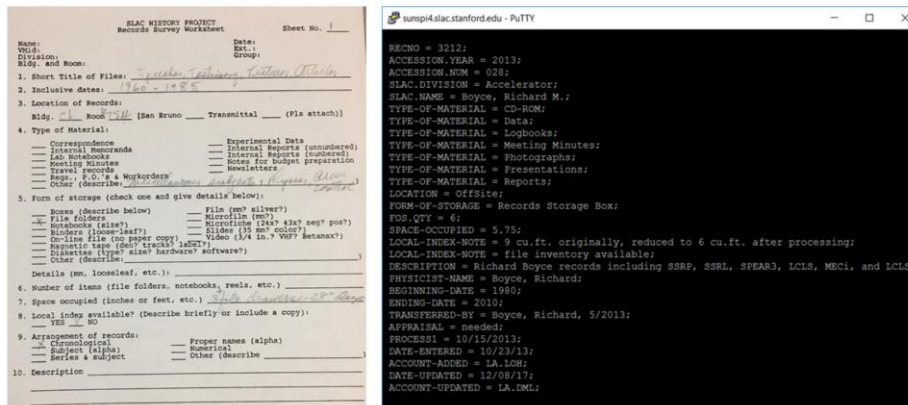
Who we are

- Founded in 1989
- Records Management function incorporated in Fall, 2016
- Small (approx. 2300 cf storage capacity on compact shelving)

## Before MPLP: Triage Processing

SLAC

- 1<sup>st</sup> Level: Basic Processing for Access
  - Minimal accession record
  - Essential preservation only



The image shows two side-by-side documents. On the left is a handwritten 'SLAC HISTORY PROJECT Records Survey Worksheet' (Sheet No. 1) with fields for Name, Date, Division, and Room, and numbered sections for file titles, inclusive dates, location of records, type of material, form of storage, and other details. On the right is a screenshot of a terminal window displaying a SLACHIST database record for accession 3212, including fields like RECD, ACCESSION\_YEAR, SLAC\_DIVISION, and a detailed description of the records.

AHRO complies with relevant state and federal laws and with DOE records management policies and procedures. We also practice “triage processing”

### 1st level

- all accessions (searchable) for access
- Accession #, Short title, Qty., 1-2 sentence description, BD/ED dates
  - Note: transitioning to bulk/inclusive dates & limiting abbreviations (undated vs. n.d.) in accordance with DACS (role of standards in processing)
- rehousing to stabilize (remove 3-ring binders / hanging folders; not all folders)

On the left:

Handwritten sample of survey record; SLACHIST database (started 1986/7)

On the right:

Current accession record--We actually use the same database (home grown SPIRES) started 1992; 1996 MARC compatible update

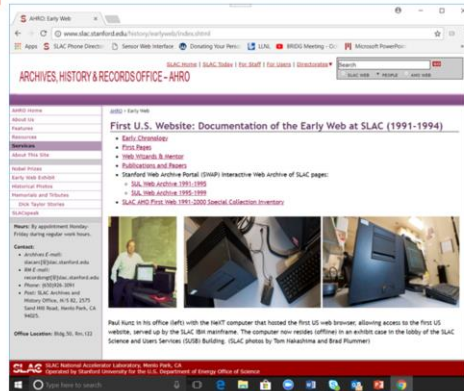
(Migration desperately needed...initiated 5 years ago but setbacks due to cost and layoffs/decreased staffing)

Ref. (citation): computers resulted in 37% increased processing rate (benchmark at an archive in 80s/90s)

## Triage Processing (continued)

SLAC

- **2<sup>nd</sup> Level: Intermediate**
  - Often reference driven
  - More description (e.g. folder list)
- **3<sup>rd</sup> Level: Traditional/Formal**
  - Finding aid
  - Only a select few



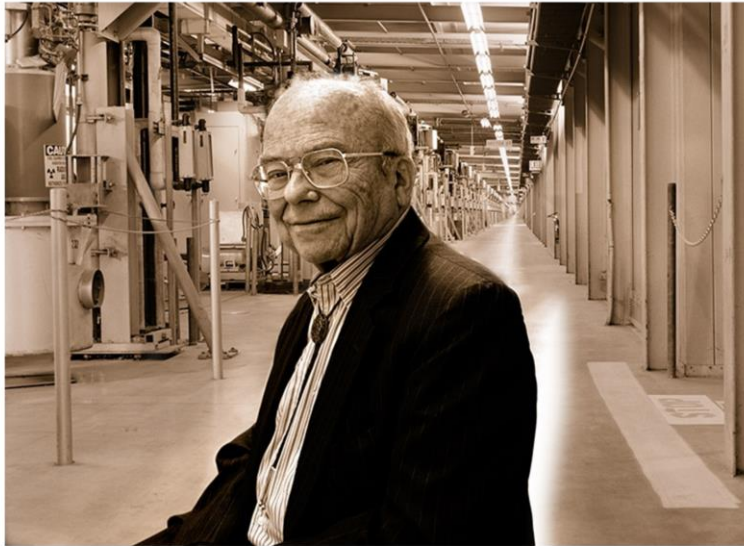
5

Collections “in processing” are OPEN to researchers  
Easier to enhance description as encountered (ultimately saves time)

3<sup>rd</sup> level: 1<sup>st</sup> www (web exhibit), Richter (2<sup>nd</sup> director & Nobel Prize winner) & Panofsky

**Wolfgang “Pief” K. H. Panofsky, 1919-2007**

SLAC



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SLAC's founding director, 1962-1984

Renowned Particle Physicist and Professor

International Science Advisor

Arms Control and International Security Expert

Awarded numerous honors, including:

U.S. National Medal of Science (1969)

American Physical Society (Fellow & President, 1974)

Enrico Fermi Award (1979)

16 honorary degrees and more...

## Cultural “Cameos”

SLAC



asking out turf somewhere in the vicinity of 1340-Seymour-Hayet, is exactly the sort of thing that in the Russian mind makes a surprise attack feasible—a disarming-embussing strategy. Wigener's seemingly innocent civildelence proposal. If adopted, is exactly the sort of element that in a crisis situation could click the mind of a trigger-happy enemy into Kaban's thinkable.

"We do not wish to deny, of course," Wigener writes, "that it is even better if no nuclear explosion takes place." But his call for a huge civil-delence program is an important element in the new doomsday machine, making him different from all the other disarming-escape, of course, that in Szrang-lovian logic, the more things appear to be different, the more they are really the same.

Dr. Wolfgang Hermann Panofsky was born in Berlin and was naturalized in 1942. Dr. Panofsky may be the brightest man in the world. He is 5'2" tall, weighs 150 pounds, neither smokes nor drinks and is manifestly, painfully indifferent to



Sheldon: "I'd like you to meet Oppenheimer, Frisch, Panofsky, Feynman, Weisskopf..."

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Perhaps the only physicist who...

-served as Presidential advisor (pictured seated across from Eisenhower)

-pictured with Pope

-and held the dubious distinction of being featured in Playboy magazine (June 1977

"...Panofsky may be the brightest man in the world...")

and in June 1961 the New York Times labeled him a nuclear "sleuth" (Panofsky p. 690).



STANFORD LINEAR ACCELERATOR CENTER  
Archives & History Office

## DIRECTOR'S OFFICE RECORDS CONTROL SCHEDULE

### SCOPE:

This schedule covers records of the Office of the Director, the Office of the Deputy Director, and the Office of the Director of Research, regardless of format (paper, electronic, magnetic, photographic, etc.) Routine administrative records not mentioned in this schedule are covered by either the General Records Schedule or the Department of Energy Records Schedules. Contact the SLAC Archives and History Office to schedule records of these offices not listed here.

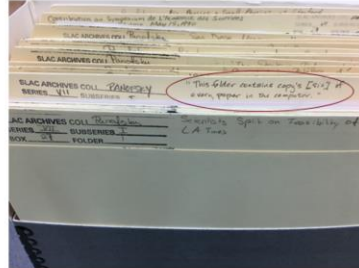
### PART 1: RESEARCH & DEVELOPMENT PROGRAM MANAGEMENT RECORDS

R&D Program Management records document the basis for research and development program management decisions, direction, policies and responsibilities, and the planning and status of research projects within a program. A program is an organized group of projects that may be related by a single theme. Projects making up a program may involve different technology disciplines and may be conducted by several organizations. Program records identified in this section may also include technical committee and board records.

### DESCRIPTION:

**R&D Program Planning Records.** Records of boards and committees studying assigned technical research and development problems, including requirements for or the authorization of projects, the scheduling and phasing of projects or programs, and the control and coordination of various R&D project phases or programs. Records consist of agendas, directives, minutes of meetings, papers relating to the establishment, revision, or termination of projects, and other papers reflecting the boards or committees' actions.

- 225+ cubic feet
- 36+ accessions from 1989 to 2007 (& beyond)
- Multiple formats (not so much digital)



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## Scope & Contents:

Academic papers

Administrative records (Project M & SLAC)

Science Policy: extensive records from gov & advisory orgs, incl. subject files/refs

Professional, Publications, and Personal

Correspondence

Photos, Artifacts & Memorabilia

Did not deal much with integrating born-digital materials

\*printouts:

- "This folder contains...every paper on this computer"

- email **Most dictated by him to his admin, who managed his acct.**

\*contrast with current Director—very little paper/print to archive--need to be proactive in collecting!

Collecting during his lifetime...and even after

incl. reference inquiries (and "checks" e.g. 2 books with same title)

Conscious (initials, stickies, "my paper published here")

Director's Office records schedule.



## Many hands...

SLAC



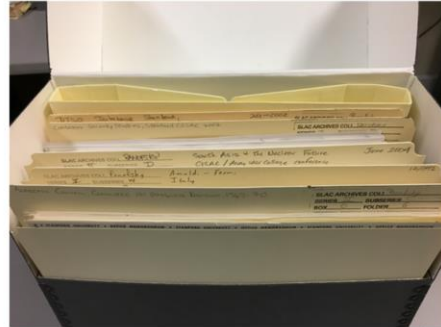
Pief with Barbara, Ellie, and Mary Beth

### Archives staff:

Rocky Nilan  
Robin Chandler  
Jean Deken  
Penny Ahlstrand  
Laura O'Hara  
Jennifer McCann

### Interns/Temps:

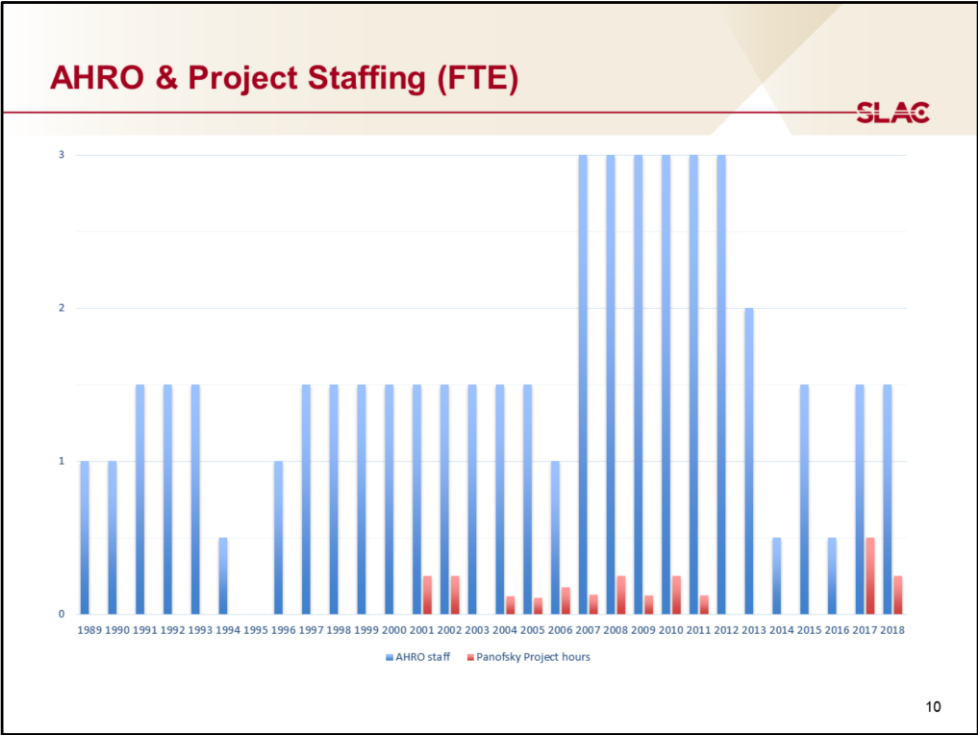
Bryan Johnson  
Irene Sanchez  
Liam O'Hanlon  
Justin Li  
Antje Morgenstern



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Pief's last 3 admins [had many previous to these... including Laurose Richter, who married Burton Richter, Pief's successor]

JMD: "rotating series of assistants of various skill levels"



Challenges:

- Loss of staff/funds (including an entire year when the archives had NO staff)
- Competing priorities

## Panofsky Papers Processing History

SLAC

- 1985 March: SU Archivist contacts Panofsky ... regarding disposition of papers
- 1994 Summer: Grad student EP hired to process Panofsky papers
- 1999 AHO supported planning and exhibitions for Panofsky 80<sup>th</sup> birthday celebration
- 2001 Summer student BJ works on reboxing Panofsky papers...
- 2002 Summer Student IS works on ... Panofsky mss. box labeling
- 2004
  - Spring: PPA on Panofsky Papers Project ...
  - April: JMD & EP conduct oral history interviews with Panofsky in April
- 2006
  - PPA returns for Panofsky Papers project
  - August: Summer student LO assists
- 2007
  - May: PPA working on Panofsky Papers, new receipts and finding aid
  - Sept. 24: Panofsky dies. JMD sets up the "Pief Stories" site on web
  - November: Panofsky memoir published by Springer
- 2008 March/April: LO and JMD support Panofsky Symposium
- PPA continues on Panofsky Papers Project.
- 2009 April: JMc begins assisting ... Panofsky papers project during ... downtimes
- July: JMc continues assisting in Panofsky collection re-folding
- 2010 July: PPA continues work on Panofsky Papers project
- 2011 Mar: JMc continues assisting with Panofsky Papers project....
- 2013 August: Researcher for Panofsky Papers in Archives
- 2014 June: 125-page transcript of AIP-funded 2004 oral history completed
- 2017 Panofsky processing resumes; AM (temp) hired to assist

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from Jean's history

Spans 34 years!

Note: related projects (oral history, memoir, symposium) in gray

Can see gaps....

JMD: "realities of small repo: projects picked up/put down in mid-stride many times by many people based on many internal and external factors"

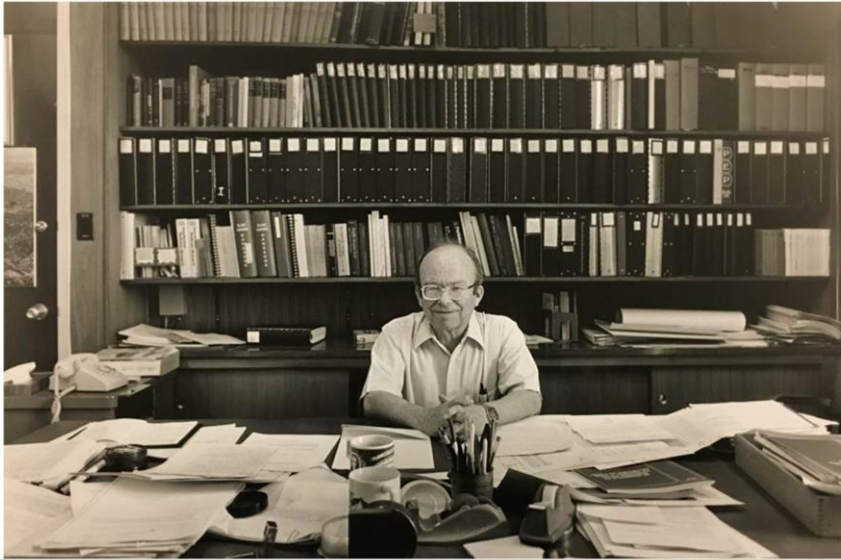
LO: 82 cf in first 5 yrs

### SLAC AHO Program Review 9/14-15/2007

FY05-06 Project: \_Continued processing: 132 cu.ft. of new materials, 81 linear feet reviewed  
Papers continue to flow into AHO from Pief's office...

### SLAC AHO Program Review 9/16-17, 2010

Organize 2007-2009\_427 mss boxes, 63 RSC (cubes) approx. 205cf total  
Rehousing / refining series: 10 series; 74 subseries; Est. 15,400 archival folders when complete  
Incorporating recent receipts  
35+ separate accessions incorporated since 2007  
Goal: online finding aid



Complicated collection!  
Complexity: icks & ughs

Accessions:

- Verified which were processed
- Determined what wasn't Panofsky's
  - one accession actually from a different division
  - TNs, etc.

## Separations: What belongs?

SLAC



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Classified material had been inventoried and transferred to [LLNL \(Livermore\)](#)

Helpful markers

DON'T DISPOSE DURING PROCESSING

Ex.1 Westwick mss – integrated (knowing people sent drafts for Pief's review)

Ex.2 Faculty Committee papers (even though duplicated in other collections)

Ex. 3 Papers not Pief's (See Barbara's writing)

Ex. 4 Rare book on microfilm (separation, but keep)

Books! To SLAC Library

talked about this several times and one summer intern started checking those titles from Pief against our holdings in SPIRES. It's not just monographs, it's reprints, which are more difficult to pin down sometimes, but often already online in full text.

No significant marginalia or anything else that would warrant a special collection (PPA)

also other authors' publications

New materials ....

Artifacts: art? birthday hat??

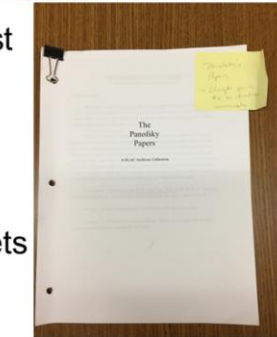


### Defer less urgent mass preservation tasks

\*at-risk papers indicated in container list

### Create future project list:

- SLAC publications  
compilation & digitization of master sets
- Reformatting (film, audiotapes)
- Proofreading transcripts of dictations
- Digital forensics for 60+ diskettes

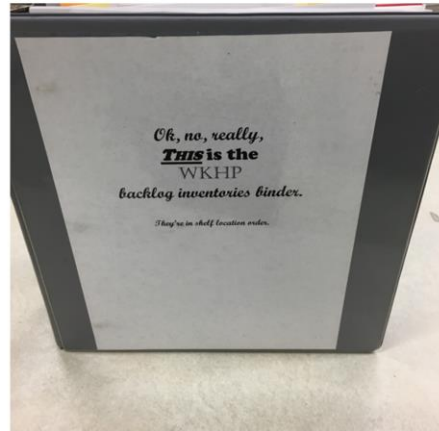
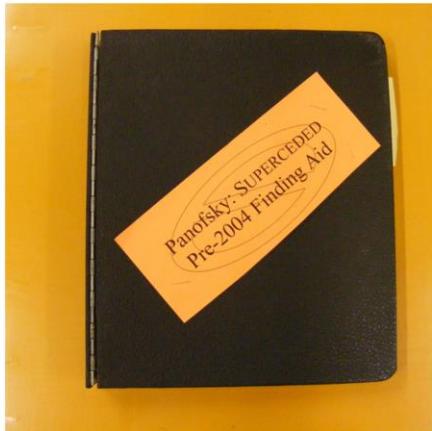


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controlled environment and “microclimates” as adequate preservation (citation)

See sticky (JMD note on Rocky’s draft: change from Roman to Arabic #s)

Oh no! moment—we’re not going to renumber 100’s of boxes & 1000’s of folders



Documentation really helpful, esp. status (both Executive Summary and handwritten notes):

- what's been done
- what needs to be done (incl. Box counts, Supply needs)

Already had folder lists of accessions

Already had a draft of the finding aid from 1984 (will come back to this later....):

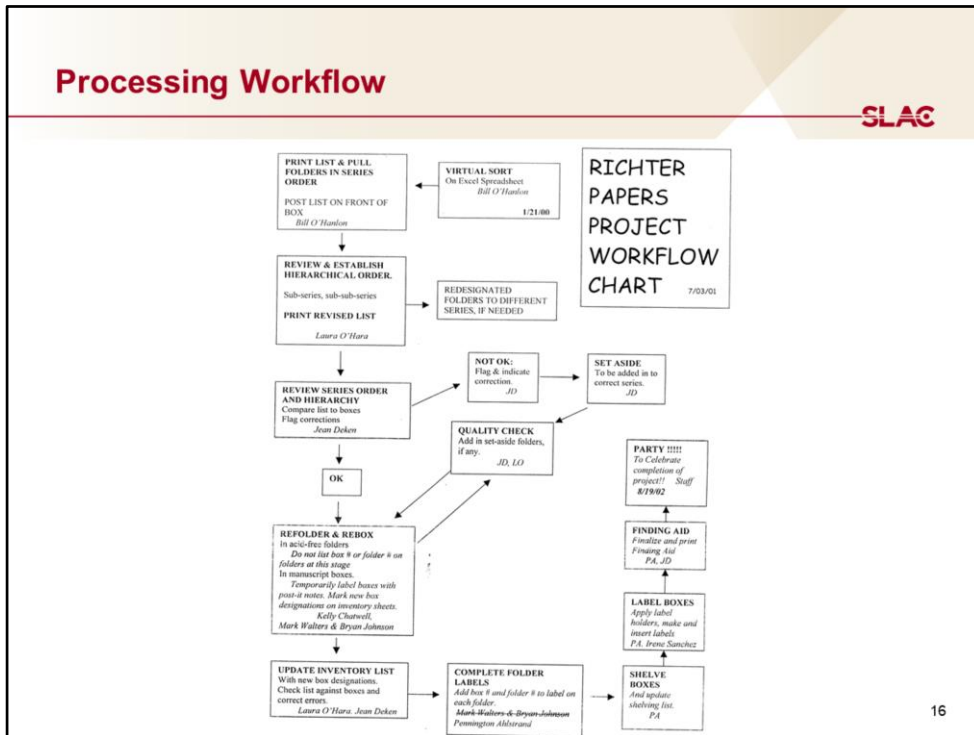
- well-researched, very detailed (13 page biography **by first Archivist, Roxanne Nilan**)
- descriptions and series notes (11 page narrative incl. SLAC history)
- end product in view!

ALSO well-organized electronic file directory (2006-2010, 2013) **by Penny Ahlstrand**  
With past & CURRENT/LOOK HERE



## Processing Workflow

SLAC



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Able to apply workflow previously developed

Expand on incremental processing & virtual sort technique?

Jean's gems:

\*"realization that all formats [& processes]—even digital—have strengths & weaknesses"; technology facilitates new processing approaches

\*strategy: virtual sort

-maintain access/reference service during processing

- "sufficiently logical & complete"; flag ?'s/problems; iterations

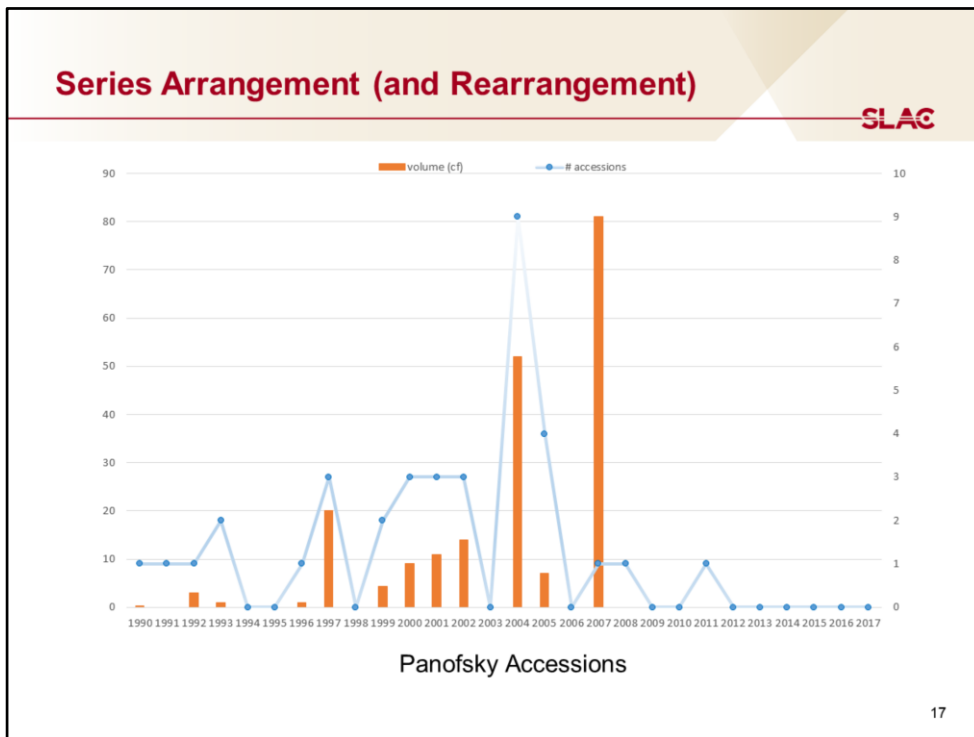
-check for accuracy/logical sequencing & final review

- "encountered evidence of short-lived efforts to systematically org parts several times"

-forensic evidence

But couldn't use Richter Papers arrangement/series as a guide

-Career paths too different to "borrow" series structure



### Challenges:

Complex collection, esp. overlapping policy work (e.g. multipurpose int'l trips)

Incorporating new material

-Last accession: important/vital documents mixed with "current"/ in use at the time.

20 cu.ft., 2007

starting 1990?: 1st accession; Orig. 7 series > expanded to 18 series (policy S.to DD....)

2000s: tried to match what they'd done w/2<sup>nd</sup> accumulated accessions.

dozens of new organizations that Pief had gotten involved with since the first accessions--new orgs added as encountered --hard to know if name change or really a new org. ; series to DD! - PPA

Existing series restrictive (sort of fit, mult. fit, no fit)

Career shift from day-to-day SLAC to wide-ranging policy work

Can't simply insert new accretions but no physical change to first set (bit integrated)

New series/subseries reflect expanding interest & content ; annotations (LO)

Recent: mostly refinements (now 10 series)

Note: DIGITAL (often separate workflow)

Enhanced search capability to allay arrangement "agonizing"?

*Or OCR to replace finding aids altogether!*

Larisa Miller (2013) *All Text Considered: A Perspective on Mass Digitizing and Archival Processing*. *The American Archivist*: Fall/Winter 2013, Vol. 76, No. 2, pp. 521-541.

<https://doi.org/10.17723/aarc.76.2.6q005254035w2076>

## Arrangement & Description: New Series/Subseries

SLAC

- Correspondence
  - subseries to reflect organizational change
  - automated sorting
- Artifacts & ephemera
  - adding context...
  - photographs (not just personal)



???



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Corr organization didn't match –possibly a change in administration  
Also ABC issues

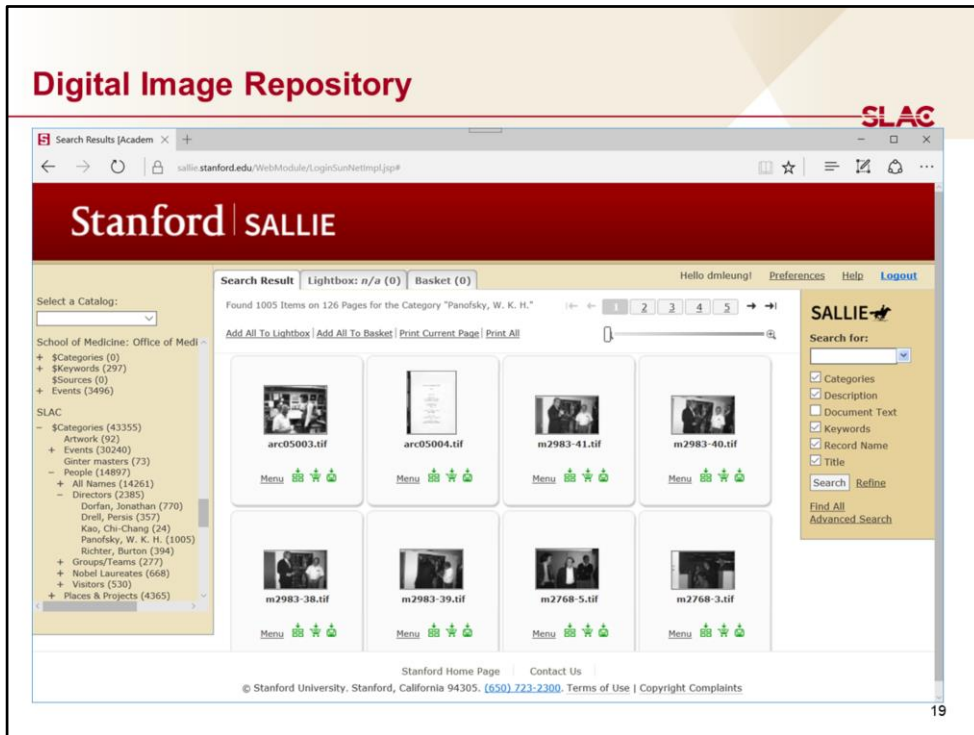
Later series: artifacts, photos

W. K. H. Panofsky, and Eric Sorensen in Panofsky's office at SLAC with model of paleoparadoxia carved by Sorensen. The fossil has been renamed “Neoparadoxia repenningi” (see SLAC AHRO webpage at <http://www.slac.stanford.edu/history/paleo.shtml>).

Tech ex: Google Translate to identify Romeo & Juliet program  
(fail for Chinese inscription on photo)

photographs (not just personal)

-family photos cataloged & scanned/digitized (approx. 200)



SALLIE free (major migration project from PHOTOINDEX database)  
Includes 300 scanned from family collection & individually cataloged  
Many prints, negatives also in collection

**Challenges:  
Acronyms**

SLAC

**CISAC** Center for International  
Security and Cooperation  
(Stanford)

≠

*The National  
Academies of*

SCIENCES  
ENGINEERING  
MEDICINE

COMMITTEE ON INTERNATIONAL  
SECURITY AND ARMS CONTROL

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Several folders misfiled; rearranged in appropriate series/subseries

Note: SLACspeak <http://www.slac.stanford.edu/history/slacspeak/>

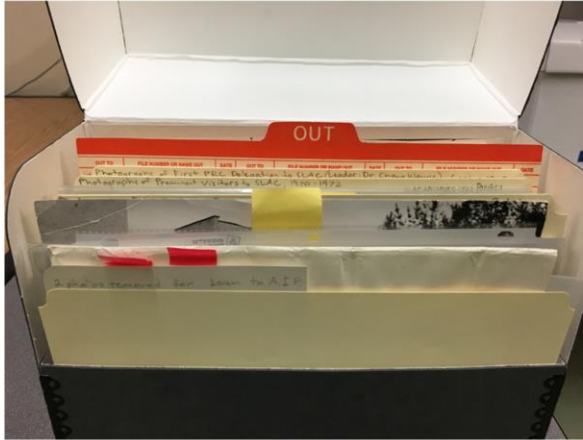
Also one of the later series/subseries needed work for arrangement:

\*sandbox tip (location tags)

\*chronicle arrangement of lectures helped with identifying duplicates & weeding

## Challenge: Tracking items and locations

SLAC



Photographs on loan to AIP  
- Placeholders

Reference & Return  
- OUT card

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Photos:

- 1) Temporary loan to AIP
  - positive: enhanced descriptions
  - outweighs add'l time to re-place photos in original order
  - facilitated by numbered placeholders with descriptions for replacement
- 2) OUT cards (access/reference requests)
  - Photos scanned to SLAC photo website (pre-SALLIE)
  - (duplication of images)

## Series descriptions from original draft of finding aid

SLAC

*“Files regarding Project M from other sources are in process in the SLAC Archives though the correspondence maintained by Project business director Fred Pindar has been interfiled with that of Panofsky in order to create a more complete record. Although this results in some duplication, there is a great deal of unique material.”*

### **VII. Personal/Professional Activities and Publications**

This series consists of a chronological arrangement of Panofsky's lectures, published books and articles, *his senior thesis and Ph.D. dissertation*, and some of the surrounding materials.

*\*Thesis and dissertation moved to Series I: Education*

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Example 1 (top): although not strictly following provenance, unchanged  
Example 2 (bottom): did rearrange to more appropriate series vs. preferences for arranging by “type” or format

Compare Pief's draft with Richter's finding aid?  
e.g. bio/series descriptions (much more terse)

\*Neatly organized vs. spanning—more accurately reflects overlapping nature of work

Random thoughts:

\*labels:

- Whose title was it? (his—or admin's?—or archivist's?)
- handwriting (character)

\*travel reimbursement records (typically disposed):

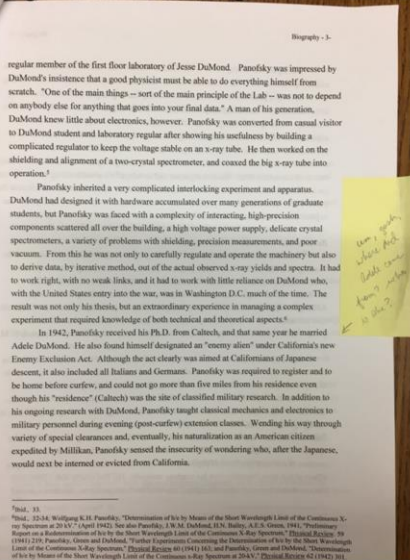
- accountability (not seen in current federal government admin.)
- Barbara's cover letter (lost perspective on staff's high opinion and defense of Pief?)



## Who is Adele?

SLAC

### Original draft of Finding Aid:



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Judgment calls in processing!

Ideal of neutrality? Beware of unconscious bias (conventions)

Adele: Eldest daughter of Pief's Ph.D. thesis advisor, Jesse DuMond, at CalTech

Recognize Pief not singular/stand-alone figure: Adele also part of SLAC's history ("Workers digging the trench for SLAC uncovered the fossilized bones of a 10-million-year-old creature resembling a hippo. Adele, dedicated years to reassembling the skeleton." – Pief's SU obit)

(<https://news.stanford.edu/news/2007/september26/pansr-092607.html>)

Photo1: Adele Panofsky shows Paleoparadoxia bones to PRC visitor group in 1973 (back of Pief's head in background!)

Photo2: Visit with Chinese Science Minister Fang Yi at the Great Hall of the People, October 14, 1983 (Adele's trip reports included in collection)

LO: "insider" prejudice/scorn? first science from site not physics

Adds a more holistic view to Pief's collection?

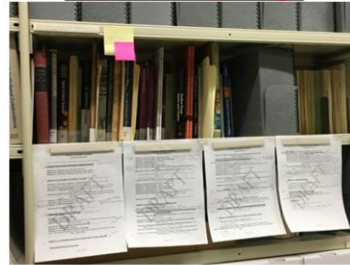
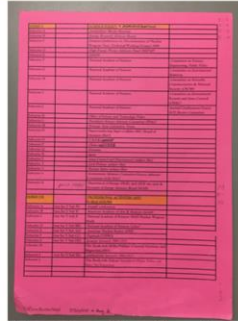
\*Richter's includes appendixes describing processing

*"transferred over a period of a decade, maintained in various ways by numerous staff with usually low priority given to systematic organization while active, evidence of attempt to classify files" (file codes preserved in container lists)*

## Summary of Processing Aids

SLAC

- Documentation
  - accession records & inventories
  - track locations
  - status
- Discussion
  - archivists' knowledge of creator & collection
  - confirm decisions in writing
- Arrangement: Virtual Sort
  - wallpaper
  - sandbox
- Other
  - c.v., bibliography
  - timeline (Pief | SU | Physics)
  - trip log
  - series reference card
  - processing flow chart
  - acronym list



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Timeline – PPA's

Trip log – PPA & JMD (& recently supplemented)

## Progress!

SLAC



April, 2013

April, 2018

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### Status:

12/2016 (=2013?): 72 cf processed, 151 needed; total: >222cf

Current: 220 cf (accts for separations & weeding)

“Getting it right” vs. (preoccupation with?) efficiency -> Useful

JMD: Planning & documentation to move forward

-Segment complex project into manageable increments

-Discrete, well-defined tasks for a better pitch to mgmt. for \$/staff

-retraining new staff vs “vision of fresh eyes”

Recognize contribution of many!

Processing is a continuum (not a straight path)



### Postmodern movement: Questioning archivists' role

- "ordinary"/everyday items & people
  - e.g. stamps (philatelic & \$ value)
- Conventions
  - weeding duplicates (# of copies as evidence of import)

\*Impact of appraisal and processing decisions

Trends: "Automation"; Collaboration/Standards; Digital/Tech; Diversity

Archivist role as Mediator (Terry Cook)

"defensible" aggregation of "related activities and archival interventions"

"Because descriptive work has to be selective archivists also make conscious decisions about what to include...what to emphasize, and what to ignore"

-Tom Nesmith 2002 Seeing Archives: Postmodernism and the Changing Intellectual Place of Archives." *American Archivist* 65:24-41.

-Reopening Archives: Bringing New Contextualities into Archival Theory and Practice. *Archivaria* 60:259-74

Jennifer Douglas (2016) *Toward More Honest Description*. *The American Archivist*, 79(1): 26-55.

Michelle Light and Tom Hyry (2002) *Colophons and Annotations: New Directions for the Finding Aid*. *The American Archivist*, 65(2): 216-230.

- AHRO already annotates!

Audience Question (esp. re: USC collection): citations of researchers included?

- (incl. secondary source material)
- AHRO requests products (e.g. books) that use our materials



### III. Judgment

Archivists should exercise professional judgment in acquiring, appraising, and processing historical materials. They should not allow personal beliefs or perspectives to affect their decisions.

-2005

#### Access and Use:

Facilitate and "maximize ease of access"

### Judgment

Archivists exercise professional judgment in appraising, acquiring, and processing materials to ensure the preservation, authenticity, *diversity, and lasting cultural* and historical value of their collections. *Archivists should carefully document their collections-related decisions and activities to make their role in the selection, retention, or creation of the historical record transparent to their institutions, donors, and users. Archivists are encouraged to consult with colleagues, relevant professionals, and communities of interest to ensure that diverse perspectives inform their actions and decisions.*

- Jan. 2012

Trend/emphasis on diversity and transparency reflected in SAA Code of Ethics update



## Processing is a continuum.

SLAC



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Processing is ...

- not a straight path
- not a lossless procedure

Stay Positive  
and  
Persevere

# SLACHIST

SLAC

SLAC HISTORY PROJECT (Key-4138)  
Records Survey Worksheet No. 19

Name: Mary E. Beerbohm Date: 08/22/86  
 UID: JMICHEL Ext.: 3373  
 Div. Research Division SLAC/Res. Cl. R154  
 Group: DO (Director's Office)

- Short Title : W. Panofsky
- Inclusive dates : 1948-1965
- Record Location : Basement Archives (Box No.: G002-INBACK, G003-FRONT, G004-INBACK, G004-FRONT)
- Type of Material: Correspondence  
Internal Memos
- Form of storage : File Folders  
Details : 10 x 12 x 15
- Number of items : 2 boxes
- Space Occupied : 10 x 15
- Local Index
- Arrangement: Haphazard ←
- Description of Records:  
Articles authored by Panofsky, Panofsky's personal notes with notes, misc. problems, old technical papers, physics courses, classified material receipts

July 9, 1991 From: SLACHIST : PANOFSKY RECORDS Page 1

reelno	short-title	dates	Description
381	Correspondence and memos concerning PFF	1960 - 1960	Correspondence and memos concerning startup of 'Preprints in Particles and Fields.' Describes acquisition of seed money from the AEC, survey of subscribers to determine utility of newsletter. SLAC Library, Fred Pindar, Doug Dupen, V. Panofsky, A. Rosenfeld, L. Addis.
523	Director's Office Admin. Files	Generally 1960-1968 small files go back Further	Director's Office Admin files, including files inherited from Panofsky. Directors atgs. SLAC/SSL, SLAC/Stanford U., SLAC, SSC, SLAC/Washington D.C. including DOE, Congress, etc. Collaborations with other labs/International agreements. H. Richter talks, personal info.
2720	Correspondence, General, V. K. H. Panofsky	1960-1966	V. Panofsky's outside correspondence, filed alphabetically in A-Z folders. In certain cases of heavy correspondence with a particular individual a file under that name is included under last name such as 'Veisshopf' filed after 'V' general.

Note: "Haphazard" arrangement