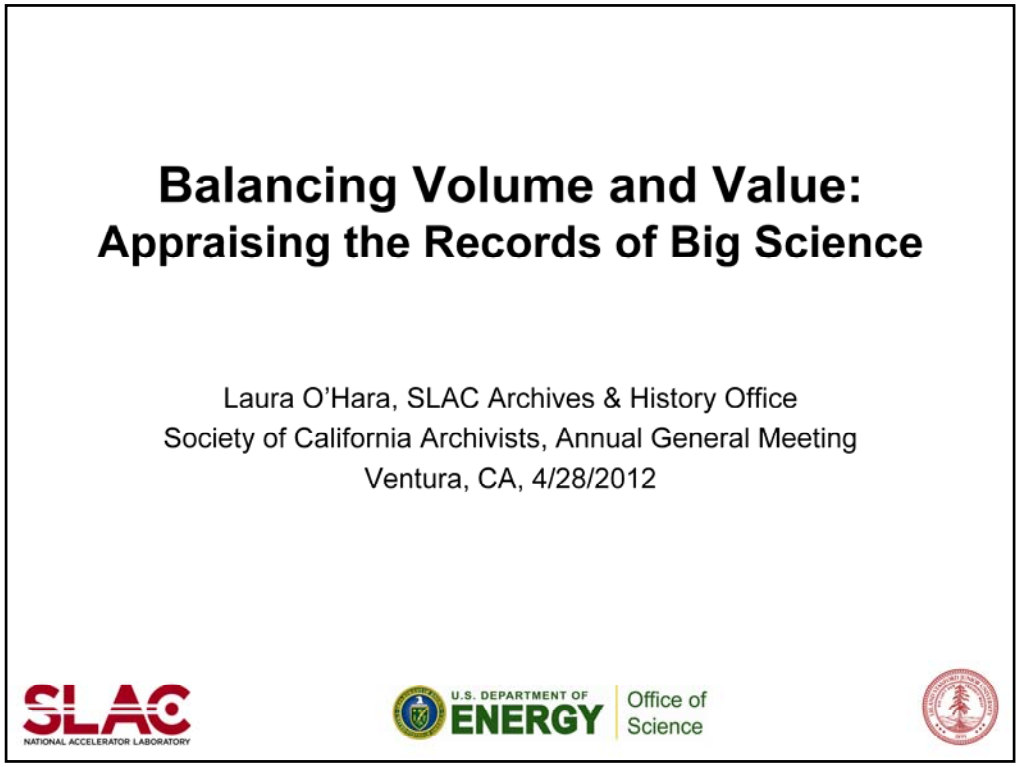


First started planning this session → What is SLAC AHO? Not a silly question

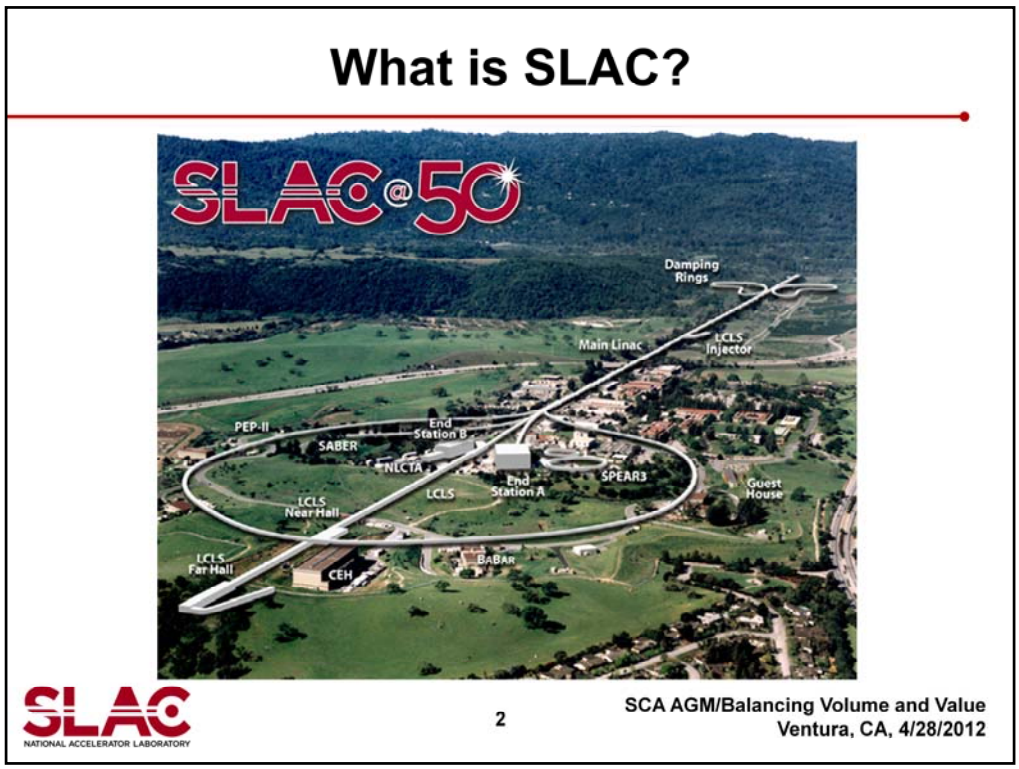
Struggle every time
- Archival survey
- Session proposal
- Application

Never sure which box

Neither fish nor fowl…straddle the line
- Government,
- Academic,
- Corporate institutions

meet

Start by setting the context…



US Department of Energy physics laboratory operated by Stanford University

2-mile linear electron accelerator—longest in the world

Established 50 yrs ago as a particle physics research center,
Now a multipurpose laboratory

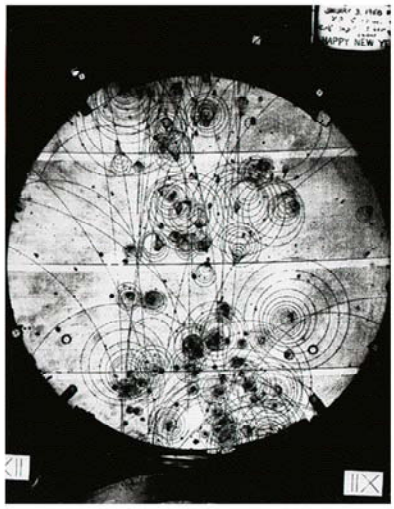
- Astrophysics,
- Photon science,
- Accelerator and
- Particle physics research.

History of reinventing itself, building on former success and repurposing its technology

What is AHO?

The SLAC Archives & History Office has the following responsibilities:

- Serves as a repository for documentation of the Laboratory's organizational and scientific history;
- Evaluates, selects, and preserves specific materials of archival significance created by Stanford University entities operating on the SLAC campus;
- Ensures compliance with relevant state and federal laws and with DOE records management policies and procedures;
- Promotes knowledge of the Laboratory's unique history and important scientific and technical accomplishments;
- Assists in the use of its collections by members of the Laboratory and University communities, visiting scholars, and the public.



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SCA AGM/Balancing Volume and Value
Ventura, CA, 4/28/2012

SLAC Archives & History Office

Currently part of the Office of the CIO, reporting to deputy chief information officer

Formal charge, but in a nutshell
Ensures that the laboratory's history is

- Identified,
- Collected,
- Preserved, and
- Made accessible
  - To the SLAC and Stanford communities,
  - To researchers, and
  - To the public.

Could say government because DOE,
or could say academic archives because Stanford,
Best equivalent is corporate
Primary collecting and reference activities are in service of our parent institution

Big science took hold...post-war period
Growth of new fields of historical study
incl. history of science and technology
Roughly same time… archives and archival appraisal …significant evolution w/ Schellenberg argued
- Archivists … active agents
- Select what will be preserved
- Rather than passive accepters …

The movement to document science and the development of archival appraisal grew up together.

Would love to go into all sorts of historical details—
- State of science archives (or lack thereof);
- Watershed conferences of historians of science and scientists concerned about their legacy;
- Study by the AIP of recordkeeping at DOE labs;
- Evolution of the R&D Records Schedule;
- Creation of the SLAC Archives

Here to talk about practical application
- R&D Schedule in real-life situations
- Other approaches to the records found in voluminous modern collections

Appraisal at SLAC AHO

Rules We Live By

- A coordinate SU archive (faculty & pre-contract papers) and
- Records Subject to U.S. Federal Regulations
  - US Department of Energy (DOE)
  - US National Archives and Records Administration (NARA)
- DOE Research and Development Records Schedule (N1-434-96-9)

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Ventura, CA, 4/28/2012

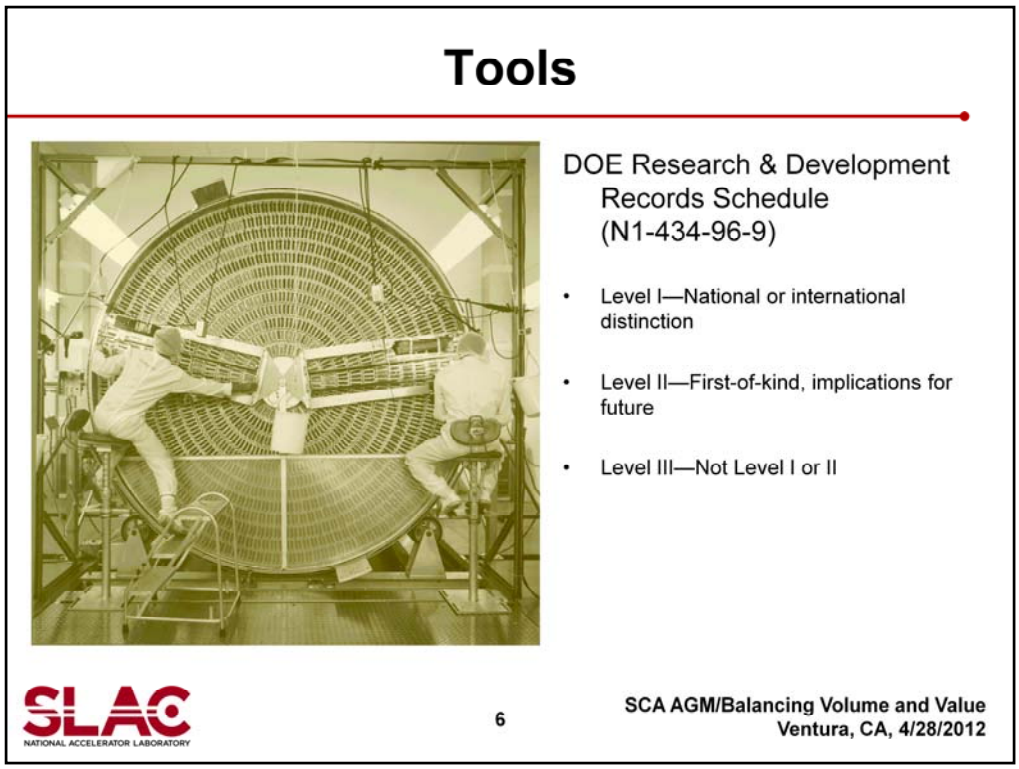
At SLAC → Federal records schedules → Can send scheduled material to NARA

But…also hold Stanford records →NARA does not take

Records requirements not in contract at this time

→Only use the DOE Research and Development Records Schedule and other federal records schedules as best practice

Stanford → no formal records requirements



Our most important tool → DOE R&D Records Schedule
- •Largely based on study and recommendations from AIP
- •Recognizes that not everything should be retained
- •Periods of reevaluation
- •Stakeholders should be involved

Schedule …much more detail … boils down to
- •Experiments or projects evaluated for level of importance
  - •Level 1s achieve nat'l or internat'l distinction (Nobel Prize)→Permanent
  - •Level 2s generally first of kind or hold implications for future →25 yrs
    - •If project … attain distinction will do so in 25 …reappraised as Level 1
  - •Level 3s… not 1s or 2s →10 yrs…enough time to complete thesis
- •Completeness of the record → usually found w/ spokespersons and key officials

Other tools for getting the goods → Some physical, others more of an attitude
- •Network of formal and informal contacts, people
  - •Who hold the records
  - •Who can influence those people
- •Knowledge of the organization
  - •Necessary to know about the person/department/experiment
  - •Where they fit in the organization and mission
- •With knowledge→ check existing holdings
  - •What we already have
  - •What our gaps are in a big picture way
- •Armed with this we can make an appraisal call.

Normally start with a visit
- •Learn what the records creators have
- •Provide them with info about what we want (or don't want)

•Tool for this visit → web page or brochure: What Should You Keep/What Can You Throw Away?
aka You Don't Have To Save It All (Great relief to records creators)
•Depending on what they have , provide supplies or return to pack

One final tool → disposal dossier for material Level Two or Three
•Includes appraisal memo and an inventory
•Memo signed off by experiment spokesperson, provides approval to proceed with disposal
•First few times … weren't sure of reception
- •Imagine going … saying … just isn't worthy
- •All have been more than fine with it

Few final notes before … actual in-practice part…
Some things we don't have to worry about because of who we are, but you might.

Until recently, SLAC's main research focus
particle physics aka high-energy physics or HEP
Results of HEP experiments →published in journals
Pre-publication drafts → provided through a pre-print server called arXiv
(capital X for the Greek letter Chi)
Whole body of published and pre-print literature → indexed through inSpire databases
- Headquartered at SLAC
- Jointly maintained by sister laboratories Europe and Japan

So the SLAC Archives does not have to worry about publications in HEP.

SLAC does not do classified research.

Also, federal laboratory, not corporation
- Do not worry proprietary information issues
- Do worry personally identifiable information

Except, maybe…

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Though might argue

- Scientific instruments,
- Technical models,
- Specimen collections

Forms of documentation

SLAC = big science so = BIG equipment

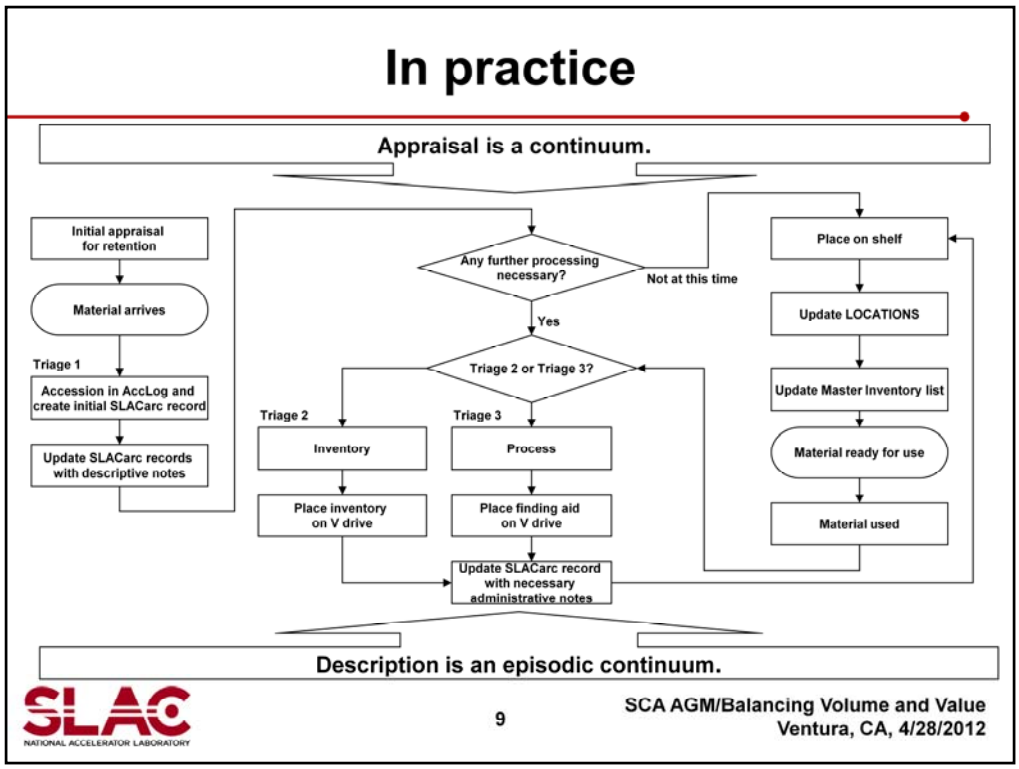
AHO relatively small space → do not collect artifacts for most part

One caveat, 50th exhibit

- Hardest part →finding objects w/ visual & dimensional interest
- Partly because do not have in collection
- Partly because just too big to fit in the case

But now, … on appraisal calls, … keeping an eye out

- No informational value,
- But do have exhibition value



So how do the R&D Records Schedule and other appraisal tools apply on the ground in our institution?

Taken on more of the appraisal calls
Happening a lot right now
- •Bunch of offices are being moved
- •A number of people are retiring

Appraisal is very much a continuum in our workflow.
Initial appraisal → house call
- •Learn what they have
- •Redirect some of it to records management

Then during packing
- •Some appraisal on the fly,
- •Very gross level, head some of the crap off at the pass

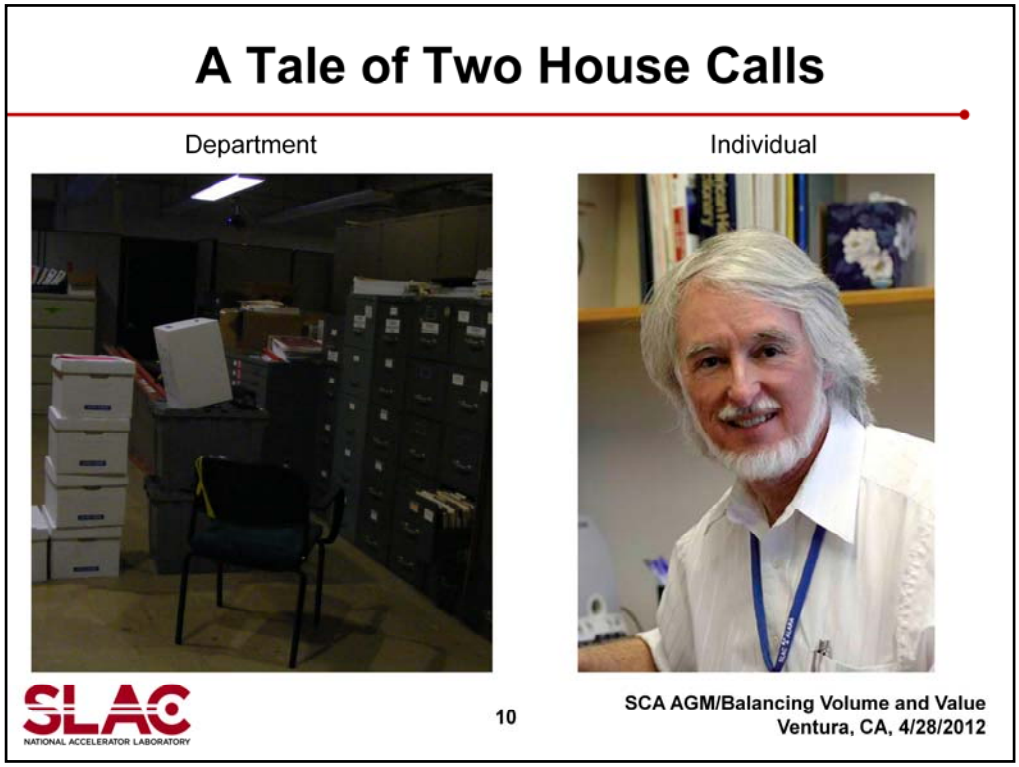
Trade-off on where time spent…packing step or next step in our space

In our space
- •Accession and describe
- •Often incl. inventory and rehousing
- •Appraise at a large grain level
- •Remove handfuls of material
- •Redirect material to records management
- •Note where material duplicates or overlaps existing holdings, etc.

Perhaps unusual to you, we also appraise during reference
because of our triage approach to processing
Triage approach acknowledges that not all records are of equal importance.
- •Everything → basic, minimal
- •Most … now progressed to intermediate , includes
  - •Comprehensive folder list
  - •Expanded database description.
- •Final level is what we all know as full-on processing
  - •Culminating in formal finding aid
  - •Very few, select collections

This triage approach allows some level of reference
- •With all of our material almost immediately
- •Further processing is reference-driven

Also means →Use accession for reference →Continue to appraise, process, and describe
Only once something has reached the final level of processing is it no longer under scrutiny—full-on processing is the final appraisal.



Two recent, very different house calls: one to a department that was moving, the other to a scientist who was retiring…

The department, Radiation Physics

- •Moving into smaller space from bldg occupied from almost the beginning of SLAC
- •Had years, nay, decades of accumulated material
- •History of SLAC's Radiation Physics dept.→ slice of the history of the field of health physics

Had everything from the beginning including

- •Personal collections of articles,
- •Departmental memos and reports,
- •Publications,
- •Radiological surveys

Meticulous records creators

- Savers to a fault …(not so meticulous in this respect)

Appraise material in several different rooms, offices, workspaces, and storage spaces

- •Internal order in some places, but also cabinets of "old stuff"
- •Every time … light at end of tunnel …another cabinet or 3

First met with them

- •They thought (were afraid) we'd say keep everything .
- •But applying records schedules → divert to RM
  - •while they have long retention periods they are not permanent

Check of our holdings

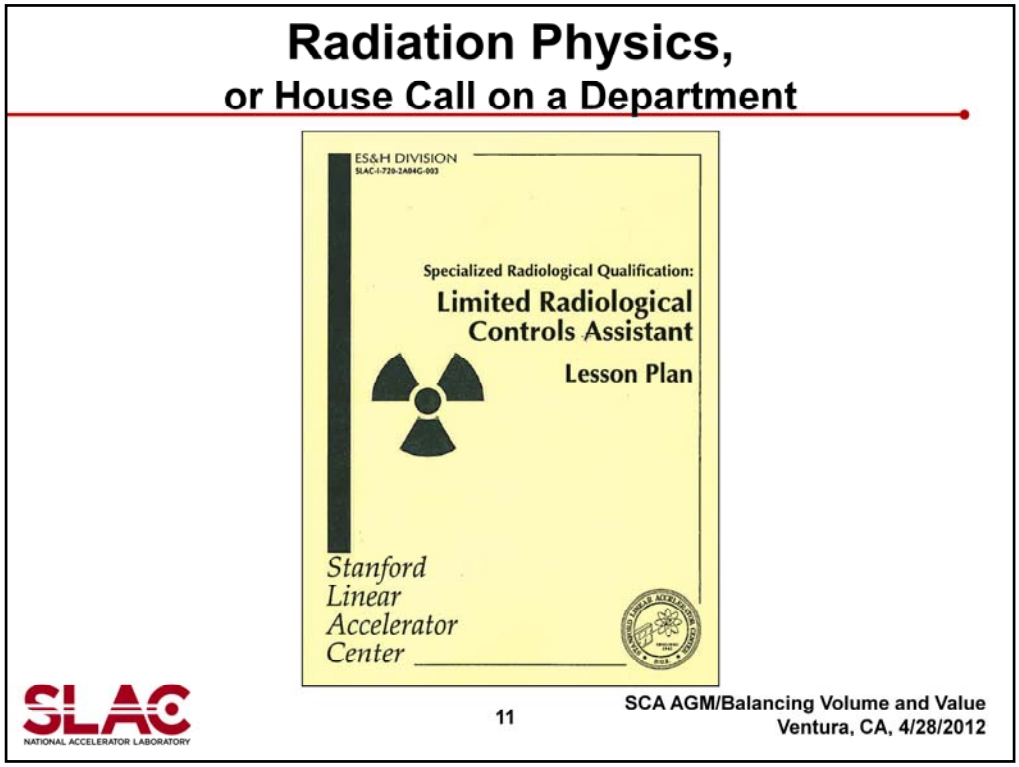
- •Very little in the way of previous accessions
- •But written history of the department →So knew who key players were

This packing trip great example of appraisal on the fly

- •Limited time to clear out the space
- •Limited space at our end to receive it →Motivated to whittle it down before transfer

As we packed

- •Immediately recognize whole shelves not of archival value→Never a whole cabinet
- •Many personal collections of articles from non-SLAC sources and publications left behind



Sometimes had to consider a little more closely, for example

- Shelf →first glance →simply numbered ES&H publications
- Do not need those, already have them from more authentic sources

But a closer examination showed

- Revision copies from a former leader in the department
- →When a copy was clean→ leave it
- But marked up w/ clearly his notes →pack it

May still be determined to be non-permanent in future handling, but on the fly they indicate some value.

In the end, took a quite a bit

- Probably some chaff
- But also some important gems
- Will be revealed as we continue to appraise and describe

After all

- Old department
- Important to the history of SLAC and of the field of health physics

Harvey,
or House Call on an Individual

2012-01-06 File Locations Page 6

Cab.	Section	Folder	Disp
C	PEP-II IR Info.	IR +/-1 1 m	-4
C	PEP-II IR Info.	IR Engineering	-4
C	PEP-II IR Info.	IR Tolerances	-4
C	PEP-II IR Info.	Near IR - 1	-4
C	PEP-II IR Info.	Near IR - 2	-4
C	PEP-II IR Info.	Near IR - 3	-4
C	PEP-II IR Info.	Near IR - 4	-4
C	PEP-II IR Info.	Near IR - 5	-4
C	PEP-II Misc. Info	BFact SC Quad Review 940408	-4
C	PEP-II Misc. Info	PEP-II Info - 1	-4
C	PEP-II Misc. Info	PEP-II Info - 2	-4
C	PEP-II Misc. Info	Progress Reports	-4
C	PEP-II Misc. Info	Q1 Final Design Review	-5
C	QuarkNet	QuarkNet 2002	-5
C	QuarkNet	QuarkNet 2003	-5
C	Rad Safe Com	Rad Safe 1994	-3
C	Rad Safe Com	Rad Safe 1995 - 1	-3
C	Rad Safe Com	Rad Safe 1995 - 2	-3
C	Rad Safe Com	Rad Safe 1996 - 1	-3
C	Rad Safe Com	Rad Safe 1996 - 2	-3
C	Rad Safe Com	Rad Safe 1996 - 3	-3
C	Rad Safe Com	Rad Safe 1997 - 1	-3
C	Rad Safe Com	Rad Safe 1997 - 2	-3
C	Rad Safe Com	Rad Safe 1998 - 1	-3
C	Rad Safe Com	RSC Reference	-3
D	Misc	Dona Wilkening Review A90105	-2
D	Misc	Emperor of Japan 940623	-2
D	Misc	ETRANS Info	-2
D	Misc	GLAST Review A20416-18	-5
D	Misc	Home Security Com	-5
D	Misc	Propaganda	0
D	Misc	Rad. Physics Dept. Head	-6
D	Misc	Science Buddies 2003-04	-5
D	Misc	Science Buddies 2004-05	-5
D	Misc	SLAC 40 (2002)	-4
D	Misc	SSCL Alumni	-2
D	Misc	Washington 970506	-4
D	Rad Safe Com	E-158 and High Power Linac	-3
D	Rad Safe Com	E-160 Review - 2	-3
D	Rad Safe Com	E-160, 161, 159 Reviews	-3
D	Rad Safe Com	E-166 Reviews	-3

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Retiring scientist on the other hand was practically a dream client.
Career also spanned decades of SLAC history.
Check of our existing holdings

- •Some material from his early years
- •Brief biography.

Contacted us→ folder list of his files with his own disposition appraisal

a. Leave with his department,
b. Take home,
c. Send to the Archives,
d. Send to Radiation Physics (he had been chair of the Radiation Safety Committee),
e. Dispose,
f. Shred

He called Radiation Physics→ were already in the process of transferring their material
So we were now being offered what he had

1. Earmarked for them
2. Already planned to send us

As I packed what he was ready to give us,

- •Good stuff, all stuff we are interested in
- •Committee minutes,
- •High-level reports,
- •Planning documents for big, important (probably level one) experiments

Also shared his disposition list

- •Reviewing it →agreed with his appraisal for shred… all personnel
- •But earmarked for disposal → great interest to us
- •When asked … "I didn't think you'd want those, they're just full of fiddly details"
- •If we wanted them, we were free to take them. We did!

Though small accession → already used it several times for ref req, even before it made it onto the shelf.

Federal, academic, personal, or what?

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Appraising an individual's records, particularly an individual with a long career, also reveals what until recently was a weakness of the R&D records schedule.

Previously schedules separated

- •Federal records (created by DOE staff as government employees)
- •Overlapping prof & personal records (created in their parallel careers as university faculty, leaders in their professions, consultants and advisors)
  - •May start as post-docs
  - •Later become principal investigators or spokespersons,
  - •Perhaps administrators,
  - •Maybe respected statesmen in national and international science policy

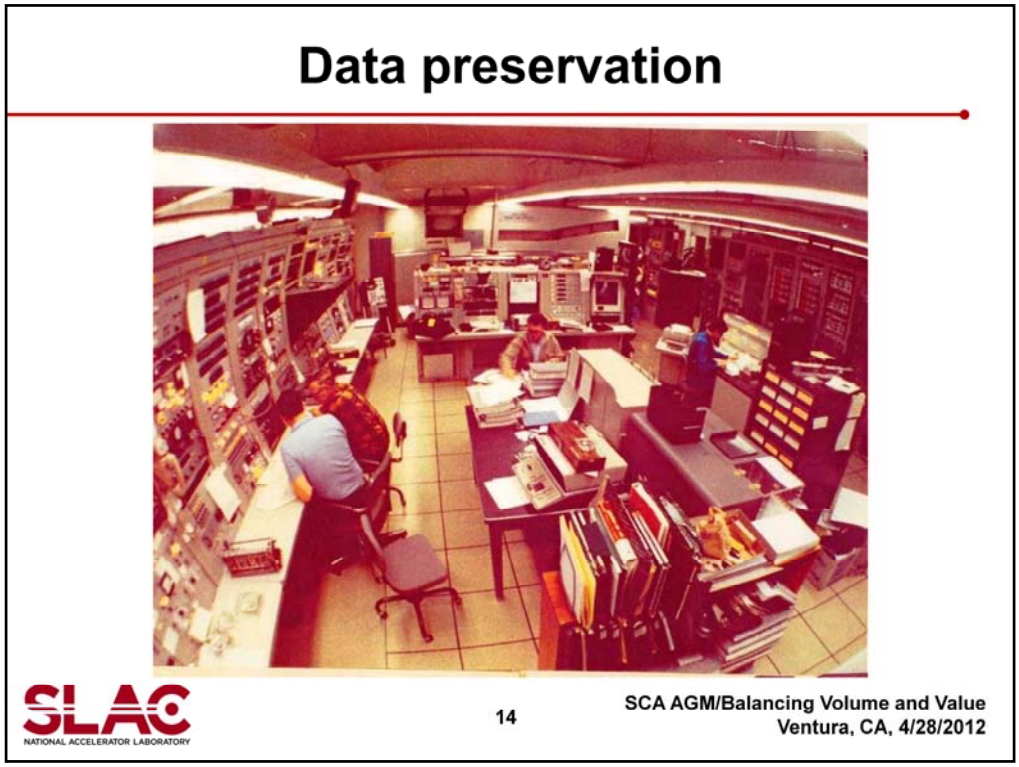
John Stoner (LBL) w/Jean Deken (SLAC) and Lee Michael (NREL) proposed revision to schedule

Rather than try to separate such an intertwined mix

- Federal records,
- Academic papers,
- Professional papers

R&D Records Schedule revised in 2008 to include a Researchers Collection item

Through this scheduling innovation, DOE and the national labs are succeeding in preserving the integrity of the records of individual researchers whose efforts span multiple roles, projects, and experiments.



Final quick aside about data preservation (whole other series of presentations)

HEP → experimental science (observational)
In past,

- •Description of experiments and analysis of results would be published.
- •Data would be discarded.
- •The publication was the thing.

However…fundamental shift … occurring in HEP, brought about by

- •Advent of massive data sets,
- •Huge collaborations,
- •Enormous budgets,
- •Decade-long experimental durations,
- •Decreasing disciplinary resources

Scientists now worrying

- •Longevity
- •Continued usefulness of their datasets

Study Group for Data Preservation and Long-Term Analysis in High Energy Physics (or DPHEP)

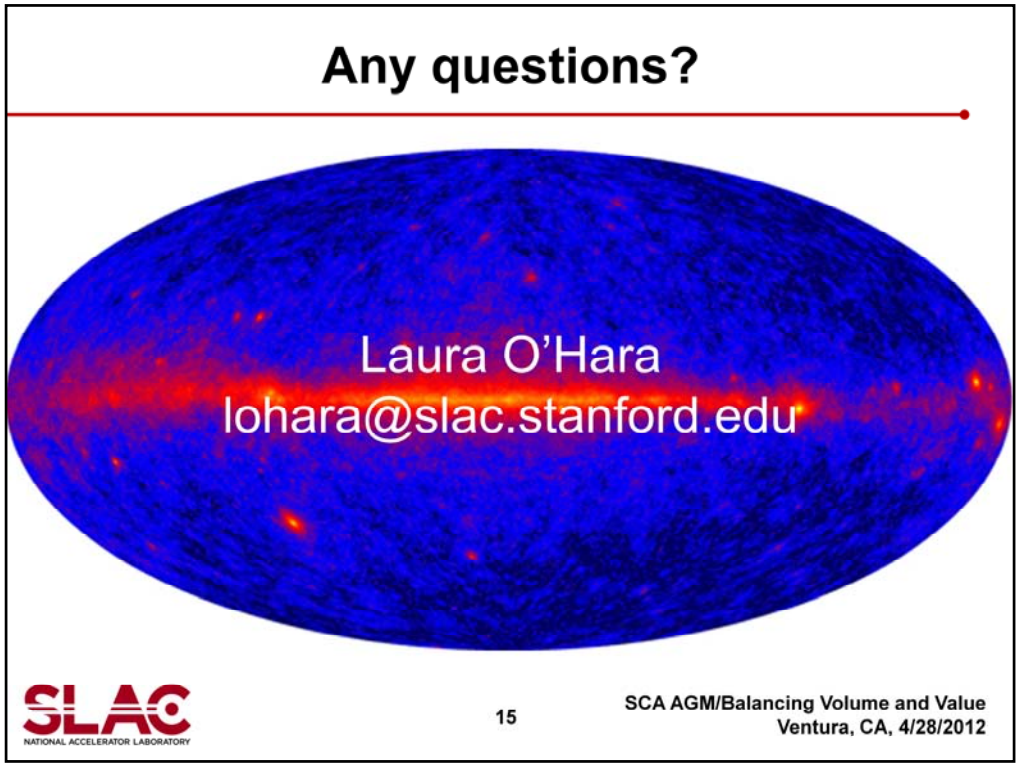
Another group--Blue Ribbon Task Force on Sustainable Preservation and Access

- •Economics of digital preservation and access
- •Incl NSF and the National Archives

Each of these groups are taking different angles and making progress on various parts of the problem.

Some tools arriving on the scene

- NSF & NIH now require data management plans in grant proposals
  - •(not quite same as data preservation, but …a step).
  - •CDL tool to help scientists create those data management plans
- Committee on Scientific and Research Data of the ICA-SUV
  - →"Handbook & Guidelines on the Handling & Preservation of Scientific Records & Data"



End here looking at a map of the entire sky in gamma rays

Quick trip through appraisal of scientific records on the ground at SLAC

If interested

- Our workflow and What Should You Keep/What Can You Throw Away? web page
- Happy to share some bibliographic resources if you follow up with me

[Part of this talk is now available in the SAA Science, Technology, and Healthcare Roundtable's newsletter *Archival Elements*, "Balancing Volume and Value: Appraising the Records of Big Science," http://www2.archivists.org/sites/all/files/aelements2012.pdf

A sequel was presented at SCA AGM 2013 (Berkeley) Session 9 http://calarchivists.org/AGM/Past probably http://calarchivists.org/Resources/Documents/AGM_Past/2013_AGM_presentation_session-09_OHara.pdf]