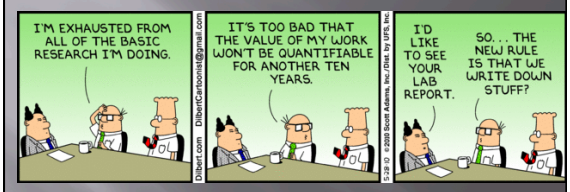
Raw Data/Documentation

- *Raw data* means any laboratory worksheets, records, memoranda, notes, or exact copies thereof, that are the result of original observations and activities of a nonclinical laboratory study and are necessary for the reconstruction and evaluation of the report of that study. In the event that exact transcripts of raw data have been prepared (e.g., tapes which have been transcribed verbatim, dated, and verified accurate by signature), the exact copy or exact transcript may be substituted for the original source as raw data. *Raw data* may include photographs, microfilm or microfiche copies, computer printouts, magnetic media, including dictated observations, and recorded data from automated instruments.



Key components of rawdata

- Each data point should be attributable to who recorded the data, when they recorded the data, and what the data signifies.
- Initials should be unique (use 3) to the user
- If one person is recording and other making observations – both persons should be identified – one as the recorder, one as the observer

BASIC RAW DATA RULES

No pencils

Write overs

Must use ink

Correction Tape

Raw Data/Documentation

- **Accurately**
  - To the appropriate significance
  - If estimating – so designate
  - If multiple measuring devices - to the significance of the least significant device
  - Balance values recorded as displayed and rounded later
  - **DO NOT ADD SIGNIFICANCE**
  - **Discourage "high speed" data**

Promptly

- Recorded as generated
- No keeping several measurements "in your head"
- No filling out data sheets at the end of the day or "when time allows" - **Real time data !!!**

Directly

- Onto appropriate forms
- Into appropriate logs
- First entry is the **RAW** data
- Extraneous observations in notes or on an "O/R" form
- If transcribed
  - so state
  - Reference or include photocopy of original
  - **MUST BE AUDITED/VERIFIED 100%**

Raw Data/Documentation

- Other Considerations
  - **In ink**
    - Color not specified
    - Indelible preferred
    - **I prefer blue due to photocopying problems (must have good copier)**

Raw Data/Documentation

- Data Correction Codes
  - **CE** - Calculation error
  - **RE** - Recording error
  - **TE** - Transcription error
  - **WO** - Writeover
  - **LE** - Late entry
  - **CL** - Clarification
  - **EC** - Entry changed at a later date
  - **SE** - Spelling error

*** Don't use EE – everything is already an entry error, talk to me – explain why the mistake was made.**

- A third party must be able to figure out why each data point was changed
- You may be required to explain to FDA/EPA in 5 years why you changed something
- EC codes must carry a complete explanation
- LE could be possible GLP violation (are you recording data late or merely clarifying an entry)
- Writeovers should indicate what the original value actually was

Inspectional findings

- **TFM failed to assure that all personnel clearly understand the functions they were to perform**
  - Data entered by personnel are changed without the required information
  - Data are entered by personnel without proper identification
  - Data forms are not completed
  - For study xxx, we observed a technician recording gross observations in pencil onto notebook paper then would transcribe recordings onto the "lab tracking sheets". The technician would then discard initial recordings after transcribing onto the tracking form.

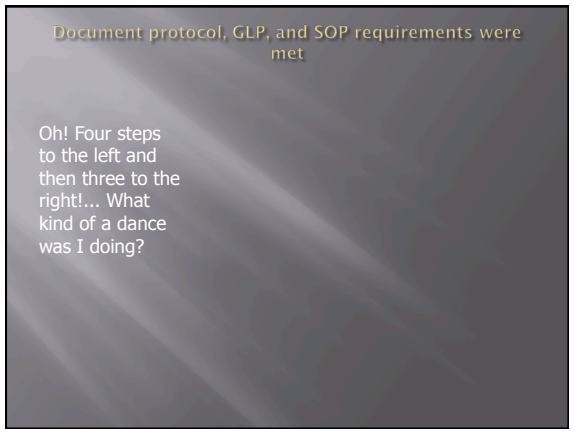
Allow for third party reconstruction at any time

My God it is Professor Dickle. Weinburg see if you can tell what the devil he was working on and the rest of you get back to your stations

Allow for complete reconstruction of the final product

"Ooo! Now here's a nice one we built last fall"


Who did what, when, and how


Document protocol, GLP, and SOP requirements were met
Oh! Four steps to the left and then three to the right!... What kind of a dance was I doing?


Must support GLP requirements

Inspectional findings

- You failed to record data generated during the conduct of a non-clinical laboratory study directly and promptly, and to sign and date data entries. Specifically,
  - For study xxx, you failed to document the time and volume of the dose administered. Consequently, the actual dose administered in the studies is unknown.
  - For study xx, you failed to record the time of collection and fixation of blood samples. The protocol required fixation of samples within six hours of blood collection. Without knowledge of the integrity of the fixed blood samples, your study director cannot provide a meaningful assessment of the data.

Raw Data/Documentation (2003 Q&A)

- If you are conducting a dose analysis in a facility that is used to working to GMP standards, what constitutes an acceptable documentation of the method? Is it adequate to just indicate that the method was followed, or would the FDA expect more specific documentation? Should the method be written, or an SOP, and does it need to be approved by management? Typically the method is in writing, and has been validated.

Raw Data/Documentation

- Dr. McCormack: We would expect more than a declarative statement that a method was followed. We would expect that the method is validated and documented in writing. The method could be written as an SOP and as such should adhere to regulations and SOPs relative to SOPs. The execution of the method should be documented to permit reconstruction of events related to the analysis, e.g., batch identification of test or control articles, reagents, solutions, equipment, personnel, instrument parameters, standard weight identification, incubation data (time in and out). Methods should describe "what is to be done", whereas documentation on the execution of the method describes "what was done".

Test system requirements met
Complete accountability
Complete documentation of problems

This here is my "famous Diet Breed " – they give skim milk and lean meat!

Raw Data/Documentation

- This question has to do with the need for data on animals prior to selection for a GLP study. Does that data need to be collected under GLP? Some of it would be collected prior to study start.
- Dr. McCormack: Background information on the suitability of animals for use in a nonclinical laboratory study would not need to be collected under GLP regulations, but should be retained to substantiate that the test system is qualified for use in the study.

Raw Data/Documentation

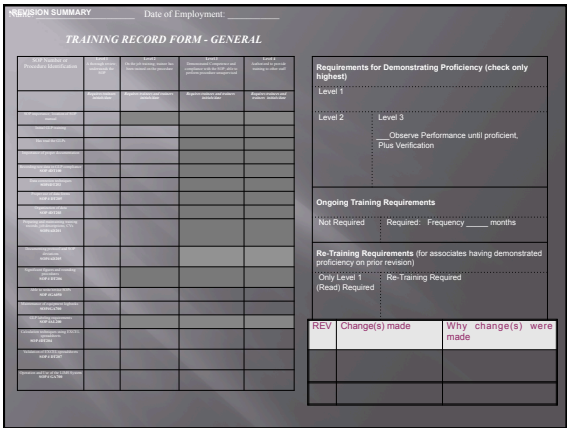
- How about surgically modified animals where this surgery precedes study start- maybe by a year or two prior to study-what about that?
- Dr. McCormack: Whatever would be needed to document the test system's suitability for the study should be retained and should be available for inspection. The information documenting the test system's suitability for use must be accurate and reliable.

Unusual responses noted and reported

Working alone, Professor Dawson stumbles into a bad section of the petri dish.

Personnel are appropriately trained

You meathead! Now watch!.. The Rabbit goes through the hole, around the tree five or six times…



REVISION SUMMARY

Date of Employment: _____

TRAINING RECORD FORM - GENERAL

Brief Statement of Procedure Identification	Level 1	Level 2	Level 3	Level 4
	Signature/ Initials and Date	Signature/ Initials and Date	Signature/ Initials and Date	Signature/ Initials and Date

Requirements for Demonstrating Proficiency (check only highest)

Level 1

Level 2

Level 3

___Observe Performance until proficient, Plus Verification

Ongoing Training Requirements

Not Required

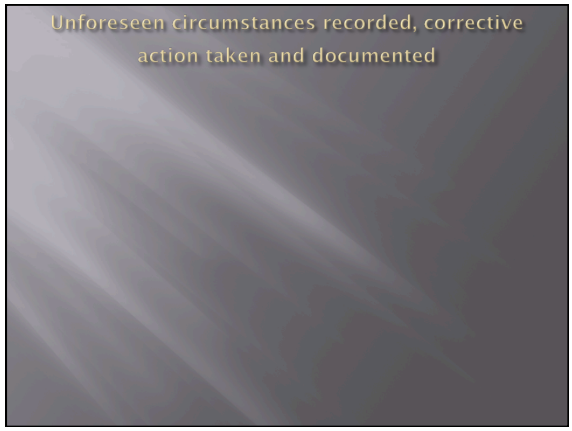
Required: Frequency ____ months

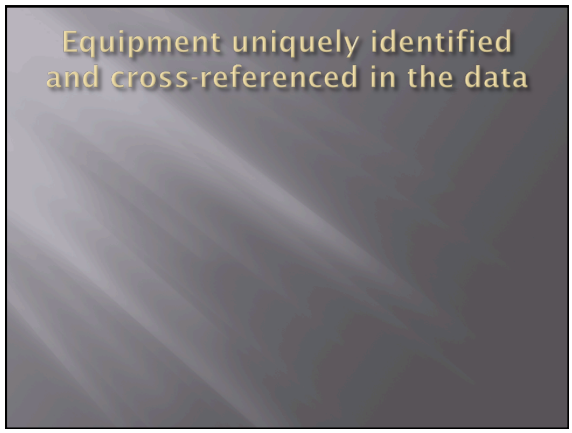
Re-Training Requirements (for associates having demonstrated proficiency on prior revision)

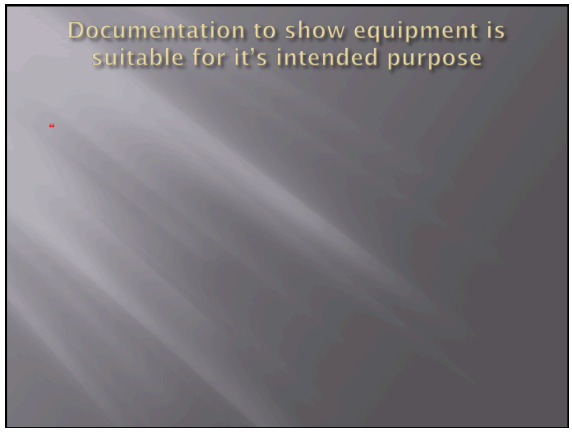
Only Level 1 (Read) Required

Re-Training Required

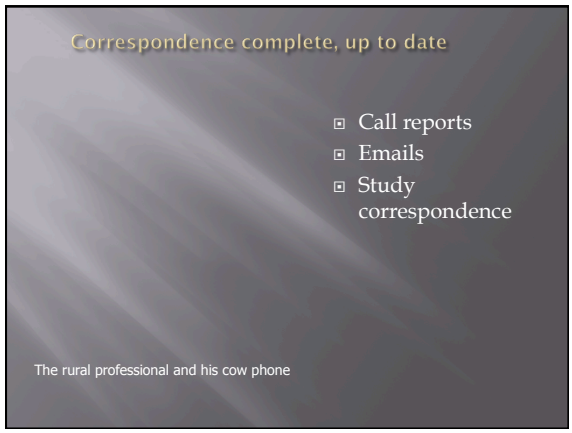
REV	Change(s) made	Why change(s) were made


Unforeseen circumstances recorded, corrective action taken and documented


Equipment uniquely identified and cross-referenced in the data


Documentation to show equipment is suitable for it's intended purpose


All data well identified and understood – labeled!!!


Correspondence complete, up to date
Call reports
Emails
Study correspondence
The rural professional and his cow phone


Key personnel actively involved
Study Directors /PIs
•Emails
•Phone logs
•Study Notification Reports
•Deviation reports

Data sheets contain unique identifier

Raw Data/Documentation

- REMEMBER - the reviewer doesn't know you; all he has is the data; the study may have to be reconstructed after you are long gone

Raw Data/Documentation

- Automated Data Recording
  - Individual responsible for direct data input identified at time of entry
  - Changes must not obscure original entry
    - Include reason
    - Date
    - Responsible person identified
  - Part 11 compliant if applicable
  - Red Apple II now available from DIA - A Quality Approach to Computerized Data Systems for Nonclinical safety assessment

Raw Data/Documentation

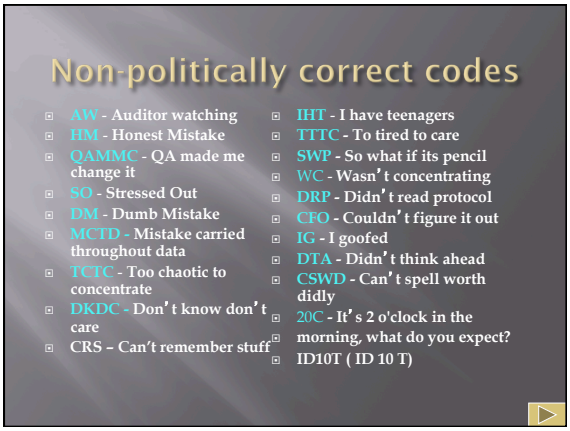
- From FDA Preamble - 1978
  - In the case of automated data collection systems the raw data are the electronic media and the software needed to read it
  - This was concurred in the EPA preamble when EPA indicated that s that they concur with FDA preamble responses of 1978

For the non-believers..

- Q&A with EPA
  - Q - FDA has indicated that an exact copy of an electronic file must include the metadata. Therefore, a paper copy cannot be considered an exact copy of an electronic file. Does EPA feel the same way?
  - A – The electronic file (and the software needed to read the electronic file) is the raw data. The paper copy is not considered an exact copy of an electronic file.

Inspectional finding

- There is no SOP to address the use, validation, or security of the spreadsheet software Excel 2000. The Excel spreadsheets are used to perform calculations for impurity method validation. The firm has not performed validation of the software for their use which would insure the accuracy and reliability of their data.


Non-politically correct codes
AW - Auditor watching
HM - Honest Mistake
QAMMC - QA made me change it
SO - Stressed Out
DM - Dumb Mistake
MCTD - Mistake carried throughout data
TCTC - Too chaotic to concentrate
DKDC - Don't know don't care
CRS – Can't remember stuff
IHT - I have teenagers
TTTC - To tired to care
SWP - So what if its pencil
WC - Wasn't concentrating
DRP - Didn't read protocol
CFO - Couldn't figure it out
IG - I goofed
DTA - Didn't think ahead
CSWD - Can't spell worth didly
20C - It's 2 o'clock in the morning, what do you expect?
ID10T (ID 10 T)