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DREW, Robert

Brookhaven National Laboratory

09/15/82
(tape abstracted, no transcript)

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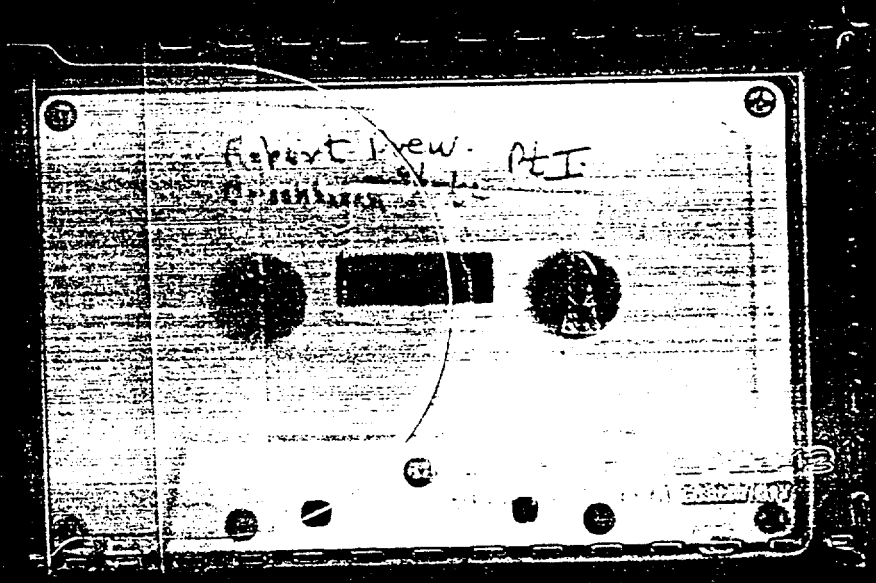

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INTERVIEW WITH ROBERT DREW - SYNOPSIS
9-15-82 (Tape not transcribed)

1. His early career - first "real job" was with Merril Eisenbud

RPI - degree in Biology

First project was with someone else but project was transfered to NYU and that is how he started working with Merril Eisenbud - 5 years

Then with Sid Laskin for 5 years

Then NIEHS - developed inhalation program - ERDA had decided to build a new inhalation facility and chose Brookhaven

Embarrassed because his view was to give more support to the existing facilities

2. Development of BNL Lab

Broad charter - both chemical and radioactive compounds - versatile facility to be constructed

Thought of whole body exposures but decided nose only was best - at least for rodents because of contamination problems

Have been working with carbon monoxide - lung irritants and lung damaging agents - ozone, silica, chlorine, fluorine - small changes - what do they mean? - 35 measurements on a single animal - he listed some of them, very expensive

3. The Rochester experience with long term experiments, e.g. uranium, and multiple measurements - years of work and many dollars to get one or two entries in a table

4. Interrelationships of radiation and chemical toxicology

5. Re/NIH set-up for inhalation experiments during WWII

6. Looked for some references to give me

7. JNS dilemma about saying too much about UR programs

8. The several AEC programs - especially the aerosol work

9. His concept of design of whole body exposure inhalation experiments - pattern of technology pretty constant until Owen Moss modified it

10. "Ferris wheel" operations at NIH and in U.K. - helped smooth out exposures since animals rotated (slowly)

11. Bob Thomas had set up at Los Alamos - before him approach was "in vitro" - reviewed lab in 1973

12. Re/Interaction between compounds - inhalation of one or more components plus intratracheal instillation of others - NYU work - (similar to what Laskin did)

13. Work at other labs on toxicity of diesel oil

14. On in vitro approaches at NYU

15. Their program at BNL - money from Dept. of Energy, National Toxicology Program, Thermal Insulation Manufacturers Assoc. (almost finished)

Mineral fibers

Hard to find things

Short vs. long fibers (in lung)

Don't understand mechanism of removal

Needle in the sponge analogy

Considerable discussion of their findings with light and electron microscope - showed me pictures - short fibers all intracellular

16. Dilemma of amounts actually in lung vs. those expected on basis of input and removal rates

17. Re/Finding actual change (carcinogenic) in lymph nodes

Fibers don't seem to do much in either lung or lymph node

18. Measuring pulmonary function in small animals after exposure to ozone, chlorine, silica, acrolein

Found animals with hypertension were more susceptable to ozone

Led to looking at influence of other conditions - stress, CO more effective (i.e. more toxic) to stressed animals

Further discussion on interrelationships