

1           SUPERIOR COURT OF THE STATE OF CALIFORNIA  
 2                   FOR THE COUNTY OF LOS ANGELES  
 3 DEPARTMENT 308           HON. CHARLES MC COY, JUDGE  
 4 RICHARD BOEKEN,           )  
 5       PLAINTIFF,            )  
 6                                    )  
                                   ) CASE NO. BC226593  
 7 VS.                            )  
                                   )  
 8 PHILIP MRRIS,            ) VOLUME 30B  
   INCORPORATED, A        )  
 9 CORPORATION; INTERNATIONAL )  
   HOUSE OF PANCAKES     )  
 10 INCORPORATED, A        )  
   CORPORATION.            )  
 11                                    )  
                                   ) DEFENDANTS.  
 12 \_\_\_\_\_)

13           REPORTER' S DAILY TRANSCRIPT OF PROCEEDINGS  
 14                   TUESDAY, MAY 8TH, 2001  
 15 APPEARANCES:  
 16 (FOR PLAINTIFF)                   LAW OFFICES OF  
   MICHAEL J. PIUZE  
 17   11755 WILSHIRE BLVD.  
   SUITE 1170  
 18   LOS ANGELES, CA 90025  
 19 (FOR DEFENDANTS)                 ARNOLD & PORTER  
   BY: MAURICE A. LEITER  
 20   JOHN CARLTON  
   777 S. FIGUEROA ST.  
 21   44TH FLOOR  
   LOS ANGELES, CA 90017  
 22  
 23 LISA C. RIDLEY  
   OFFICIAL REPORTER  
   600 S. COMMONWEALTH AVE.  
 24 ROOM 308  
   LOS ANGELES, CA 90005  
 25  
 26 VOLUME 30B OF  
   PAGES 4933 THROUGH 5017  
 27  
 28

1 LOS ANGELES, CALIFORNIA; TUESDAY, MAY 8TH, 2001

2 1:30 P.M

3 DEPARTMENT 308 HON. CHARLES MC COY, JUDGE

4

5 (THE FOLLOWING PROCEEDINGS

6 WERE HELD IN OPEN COURT IN

7 THE PRESENCE OF THE JURY.)

8

9 THE COURT: OUR JURY PANEL IS WITH US,

10 COUNSEL ARE PRESENT AS WELL.

11 GOOD AFTERNOON ALL OF YOU.

12 OUR WITNESS IS ON THE STAND.

13 MA'AM, YOU UNDERSTAND YOU ARE STILL

14 UNDER OATH.

15 THE WITNESS: YES.

16 THE COURT: MR. CARLTON.

17 MR. CARLTON: THANK YOU, YOUR HONOR.

18 THE COURT: YES, SIR.

19

20

**21 DEBORAH HOSHI ZAKI,**

22 CALLED AS A WITNESS BY THE DEFENSE, HAVING BEEN

23 PREVIOUSLY DULY SWORN, RESUMED THE WITNESS STAND

24 AND TESTIFIED FURTHER AS FOLLOWS:

25 /// /// ///

26 /// /// ///

27 /// /// ///

28 /// /// ///

1 DIRECT EXAMINATION (RESUMED)

2

3 BY MR. CARLTON:

4 Q. GOOD AFTERNOON.

5 NOW, WHERE WE LEFT OFF, YOU WERE  
6 TALKING ABOUT THE S. A. B. AND WHAT I'D LIKE TO ASK  
7 IS HAVE YOU REVIEWED GRANT APPLICATIONS FOR THE  
8 S. A. B. , TO THE S. A. B. ?

9 A. YES, I HAVE.

10 Q. HAVE YOU REVIEWED THEIR COMMENTS ON  
11 THOSE GRANT APPLICATIONS?

12 A. YES, I HAVE.

13 Q. HAVE YOU REVIEWED GRANTS THAT WERE  
14 AWARDED?

15 A. YES.

16 Q. IN THE COURSE OF LOOKING AT ALL OF  
17 THESE THINGS, DID YOU DEVELOP AN OPINION AS TO THE  
18 CRITERIA THAT THE S. A. B. USED IN AWARDING THEIR  
19 GRANTS?

20 A. YES, I DID.

21 Q. AND WHAT CRITERIA DID YOU SEE BEING  
22 APPLIED?

23 A. THE CRITERIA WAS BASED ON THE  
24 SCIENTIFIC MERIT OF THE GRANT APPLICATION. WAS THE  
25 WORK RELEVANT TO THE RESEARCH FOCAL AREAS OF C. T. R.  
26 WERE THE EXPERIMENTS REASONABLE EXPERIMENTS TO DO.

27 WAS THE RESEARCHER CAPABLE OF  
28 CARRYING OUT THAT WORK, WAS THE INSTITUTION AT

1 WHICH THE WORK WOULD BE DONE, DID THE INSTITUTION  
2 ACTUALLY HAVE ALL THE FACILITIES NECESSARY TO CARRY  
3 OUT THE WORK.

4 Q. NOW, MAYBE IT'S JUST ME, I HAD A  
5 LITTLE TROUBLE UNDERSTANDING YOU.

6 DO YOU THINK YOU COULD SPEAK INTO  
7 THE MICROPHONE A LITTLE MORE. IT COULD BE JUST ME.

8 A. OKAY, THAT'S THAT.

9 Q. ALL RIGHT.  
10 THAT SOUNDS BETTER?

11 A. SO THE CRITERIA FOR RANKING GRANTS  
12 WAS BASED ON THE SCIENTIFIC MERIT OF THE PROPOSAL,  
13 THAT WOULD MEAN WHETHER OR NOT THE -- THEY FELT  
14 THAT THE WORK COULD BE CARRIED OUT BY THE PERSON  
15 WHO WAS PROPOSING THE WORK, WHETHER THE INSTITUTION  
16 HAD THE FACILITIES WHICH WOULD ALLOW THE WORK TO BE  
17 SUCCESSFULLY CARRIED OUT, WERE THE PROPOSAL IDEAS  
18 ACTUAL THINGS THAT THEY WANTED TO DO, APPROPRIATE,  
19 DID THOSE THINGS ACTUALLY FIT IN WITH THE RESEARCH  
20 FOCUS AREAS OF C. T. R.

21 Q. ALL RIGHT. NOW, THE S. A. B. WOULD  
22 GET GRANT APPLICATIONS FROM PEOPLE AROUND THE  
23 COUNTRY; RIGHT?

24 A. CORRECT.

25 Q. THEY WOULD REVIEW THE GRANT  
26 APPLICATIONS?

27 A. YES.

28 Q. AND THEY MAKE RECOMMENDATIONS; IS

1 THAT RIGHT?

2 A. YES. THE S. A. B. WOULD THEN MAKE A  
3 RECOMMENDATION TO THE DIRECTOR OF THE SCIENTIFIC  
4 DIRECTOR.

5 Q. AND I THINK YOU SAID, THAT'S PRETTY  
6 MUCH THE WAY MANY OF THESE INSTITUTIONS WORK?

7 A. YES. THE NATIONAL INSTITUTES OF  
8 HEALTH, FOR EXAMPLE, HAS A STUDY SECTION WHICH IS  
9 EQUIVALENT TO THE C. T. R. S. A. B.

10 THE STUDY SECTION WOULD REVIEW  
11 GRANTS IN THE SAME FASHION AND THEY WOULD MAKE A  
12 RECOMMENDATION TO THESE STUDY, THE PERSON WHO'S THE  
13 HEAD OF THE STUDY SECTION, AND WE USE THE TERM  
14 "RECOMMENDATION," IT'S NOT TO SAY THAT THAT  
15 RECOMMENDATION WAS IGNORED, IT'S A RECOMMENDATION  
16 OF HOW THE GRANTS ARE ARRANGED AND WHAT SHOULD BE  
17 FUNDED.

18 Q. ARE YOU FAMILIAR WITH THE FIRST  
19 SCIENTIFIC DIRECTOR THAT C. T. R. HAD?

20 A. YES, I AM

21 Q. ALL RIGHT.

22 AND YOU HAVE PREPARED A  
23 DEMONSTRATIVE RELATING TO HIM?

24 A. YES, I HAVE.

25 Q. AND ACTUALLY, THIS DEMONSTRATIVE IS  
26 EXHIBIT 11055.

27 /// /// ///

28 /// /// ///

1                                   \* (EXHIBIT 11, 055,  
2                                   DEMONSTRATIVE, MARKED FOR I. D.)

3

4                   Q       BY MR. CARLTON: CAN YOU TELL US A  
5 LITTLE BIT ABOUT DR. CLARENCE COOK LITTLE, C. T. R. 'S  
6 FIRST SCIENTIFIC DIRECTOR?

7                   A.       YES. THAT PHOTOGRAPH, I DON'T KNOW  
8 IF YOU CAN SEE IT, BUT HE IS HOLDING A LITTLE MOUSE  
9 IN HIS HAND.

10                               I SAW THIS PHOTOGRAPH A YEAR AGO  
11 WHEN DR. LITTLE WAS BEING HONORED IN "SCIENCE"  
12 MAGAZINE FOR HIS WORK IN DEVELOPING PURE BRAIN  
13 STRAINS OF MICE.

14                               AND SO DR. LITTLE WAS, IN FACT, THE  
15 FOUNDING DIRECTOR OF JACKSON MEMORIAL LABORATORIES.  
16 AND THAT IS THE BIG LABORATORY IN OUR COUNTRY WHICH  
17 HOUSES HUNDREDS OF DIFFERENT STRAINS OF MICE NOW  
18 AND THESE STRAINS OF MICE HAVE BEEN EXTREMELY  
19 IMPORTANT IN OUR UNDERSTANDING OF CANCER.

20                               SO HE WAS THE FOUNDER OF JACKSON  
21 LAB. HE WAS ALSO, IF YOU LEAD DOWN, HE WAS THE  
22 PRESIDENT OF THE AMERICAN ASSOCIATION FOR CANCER  
23 RESEARCH. THAT IS NOW -- I AM SORRY -- ONE UP, HE  
24 WAS THE MANAGING DIRECTOR OF THE AMERICAN SOCIETY  
25 FOR THE CONTROL OF CANCERS WHICH IS NOW THE  
26 AMERICAN CANCER SOCIETY.

27                               SO HE WAS INVOLVED IN DIFFERENT  
28 GROUPS WHO WERE CONCERNED ABOUT FINDING CURES FOR

1 CANCER.

2 HE WAS ALSO, TOWARDS THE BOTTOM A  
3 MEMBER OF THE NATIONAL ADVISORY CANCER COUNCIL.

4 SO WHAT DOES THAT MEAN?

5 IT MEANS THAT HE WAS ONE OF THE  
6 MEMBERS OF THE SCIENTIFIC ADVISORY BOARD TO THE  
7 NATIONAL CANCER INSTITUTIONS WHICH IS A BRANCH OF  
8 THE NATIONAL INSTITUTES OF HEALTH.

9 SO THIS PARTICULAR N. C. I. , NATIONAL  
10 CANCER INSTITUTION, WAS MANDATED BY CONGRESS TO BE  
11 FOCUSED ON FINDING CURES FOR CANCER.

12 AND DR. LITTLE IS ONE OF THE  
13 ADVISORY BOARD MEMBERS.

14 AND SO DR. LITTLE, BEFORE BECOMING  
15 THE FIRST SCIENTIFIC DIRECTOR OF C. T. R. , HAD  
16 ALREADY MADE A MARK IN SCIENCE, HAD BEEN  
17 WELL-ACKNOWLEDGED IN A VARIETY OF WAYS, BASED ON  
18 HIS POSITIONS.

19 AND CERTAINLY, THE LAST BULLET WE  
20 HAVE THERE, HE WAS A MEMBER OF THE NATIONAL ACADEMY  
21 OF SCIENCES.

22 THIS ACADEMY, YOU NEED TO BE  
23 INVITED TO JOIN THE ACADEMY AND THEY ONLY INVITE  
24 PROBABLY ONE PERCENT OF SCIENTISTS IN THIS COUNTRY.

25 SO IT IS A VERY PRESTIGIOUS  
26 ACADEMY.

27 Q. WOULD YOU SAY THAT DR. LITTLE,  
28 C. T. R. ' S FIRST SCIENTIFIC DIRECTOR, WAS A MAN WITH

1 THAT NATIONAL REPUTATION BEFORE HE ASSUMED THAT  
2 POSITION?

3 A. YES, HE WAS.

4 Q. NOW, ARE YOU ALSO FAMILIAR WITH THE  
5 BACKGROUND OF C. T. R. 'S OTHER SCIENTIFIC DIRECTORS?

6 A. YES, I AM

7 Q. LET ME ASK, WHAT WAS THE, WHAT WAS  
8 DR. LITTLE' S TENURE, HOW LONG WAS HE IN THE  
9 POSITION OF C. T. R. SCIENTIFIC DIRECTOR,  
10 DO YOU KNOW?

11 A. WELL, HE WAS THEIR FIRST SCIENTIFIC  
12 DIRECTOR UNTIL HIS DEATH IN 1971.

13 Q. ALL RIGHT. THIS NEXT DEMONSTRATIVE  
14 IS EXHIBIT 11056.

15

16 \* (EXHIBIT 11, 056,  
17 DEMONSTRATIVE, MARKED FOR I. D. )

18

19 Q BY MR. CARLTON: AND CAN YOU TELL  
20 US, DOCTOR, ABOUT THE SCIENTIFIC DIRECTOR WHO  
21 FOLLOWED DR. LITTLE?

22 A. WELL, FOLLOWING DR. LITTLE WAS DR.  
23 GARDNER. AND AS YOU CAN SEE, HE WAS A PROFESSOR  
24 AND CHAIR OF THE ANATOMY DEPARTMENT AT YALE MEDICAL  
25 SCHOOL. AGAIN, HE WAS A PRESIDENT OF THE  
26 INTERNATIONAL UNION AGAINST CANCER. HE ALSO WAS A  
27 PRESIDENT OF THE AMERICAN ASSOCIATION OF CANCER  
28 RESEARCH AND HE WAS ALSO A MEMBER OF THE NATIONAL

1 CANCER INSTITUTE, AGAIN, AS A SCIENTIFIC ADVISORY  
2 BOARD MEMBER.

3 FOLLOWING DR. GARDNER, WE HAVE DON  
4 SOMMERS, AND AGAIN, THIS INDIVIDUAL WAS  
5 WELL-ACKNOWLEDGED IN HIS FIELD. HE WAS HEAD OF  
6 PATHOLOGY AT LENOX HILL HOSPITAL, A FACULTY MEMBER  
7 AT BOTH HARVARD AND COLUMBIA MEDICAL SCHOOLS.

8 FOLLOWING DR. SOMMERS IS DR. GLENN  
9 AND DR. MCALLISTER. AND THESE INDIVIDUALS HAD  
10 VARIOUS POSITIONS WITHIN THE BIOMEDICAL FIELDS.  
11 AND ALL OF THESE INDIVIDUALS HERE WERE WELL-SUITED  
12 TO BE SCIENTIFIC DIRECTORS OF C. T. R.

13 Q. ARE THESE INDIVIDUALS WHO HAD  
14 SIGNIFICANT CAREERS AND REPUTATIONS BEFORE THEY  
15 ASSUMED THESE POSITIONS?

16 A. YES, THEY DID.

17 Q. NOW, YOU HAVE TOLD US THAT THE  
18 S. A. B. WOULD REVIEW GRANTS AND MAKE RECOMMENDATIONS  
19 TO THESE SCIENTIFIC DIRECTORS. DID YOU NOTICE HOW  
20 OFTEN DID THE SCIENTIFIC DIRECTOR JUST NOT PAY  
21 ATTENTION TO THOSE RECOMMENDATIONS?

22 A. WELL, FROM MY REVIEW OF THE  
23 RECORDS, I CANNOT ACTUALLY RECALL ANY TIME IN WHICH  
24 THERE ARE GRANTS WHERE THE RECOMMENDATIONS WERE NOT  
25 FOLLOWED. I THINK YOU HAVE TO REALIZE THAT YOU ARE  
26 DEALING WITH A BUNCH OF SCIENTISTS AND SCIENTISTS  
27 TEND TO BE EXTREMELY STUBBORN AT TIMES AND IF THEY  
28 FELT THAT THEIR RECOMMENDATIONS WERE NOT BEING

1 HEDED.

2 ALL THE MEMBERS OF THE S. A. B. HAD  
3 FACULTY POSITIONS ELSEWHERE. IT WOULD HAVE BEEN NO  
4 PROBLEM FOR ANY OF THOSE MEMBERS JUST TO GET UP AND  
5 LEAVE THE BOARD IF THEY FELT THAT THEIR  
6 RECOMMENDATIONS WEREN' T BEING FOLLOWED.

7 Q. SO BASED UPON EVERYTHING YOU HAVE  
8 REVIEWED, WAS THE MECHANISM THAT C. T. R. USED TO  
9 REVIEW AND APPROVE GRANT APPLICATIONS, CONSISTENT  
10 WITH THE FUNDING MECHANISMS USED BY OTHER  
11 INSTITUTIONS IN THE BIOMEDICAL RESEARCH AREA?

12 A. IT WAS VERY SIMILAR AND, YES, IT  
13 WAS EXTREMELY SIMILAR.

14 Q. WHAT I' D LIKE TO DO NOW IS TO TURN  
15 SPECIFICALLY, IF WE COULD, TO C. T. R. ' S PROGRAM  
16 RELEVANT TO LUNG CANCER RESEARCH. CAN WE DO THAT?

17 A. UH-HUH.

18 Q. ALL RIGHT.

19 WHICH DEMONSTRATIVE IS EXHIBIT  
20 11057.

21

22 \* (EXHIBIT 11, 057,  
23 DEMONSTRATIVE, MARKED FOR I. D. )

24

25 Q BY MR. CARLTON: NOW, YOU HAVE PUT  
26 THIS TOGETHER, PERHAPS YOU CAN STEP DOWN AS YOU DID  
27 WITH THE OTHER BOARD AND EXPLAIN TO US WHAT ALL OF  
28 THIS MEANS.

1                   WOULD THAT BE ALL RIGHT, YOUR  
2 HONOR?

3                   THE COURT: IT WOULD BE.

4                   Q       BY MR. CARLTON: LOOKING AT THE  
5 FIRST, FIRST ITEM YOU HAVE GOT FROM, AND THIS IS --  
6 WELL, TELL US WHAT DOES THIS SUMMARIZE?

7                   A.       SO WHAT I HAVE OUTLINED HERE IS THE  
8 LUNG CANCER RESEARCH PROGRAM AND I HAVE BROKEN IT  
9 UP INTO SEVERAL DIFFERENT TOPICS.

10                   THESE TOPICS ARE LISTED IN PART BY  
11 WHAT WAS FUNDED AT THE EARLIEST TIMES IN THE  
12 PROGRAM, DOWN TO WHAT WAS MAINLY FUNDED TOWARDS THE  
13 END OF THE PROGRAM

14                   ALL RIGHT. AND SO IN THE  
15 BEGINNING, IN 1954, C. T. R. DID FUND A LOT OF  
16 EPIDEMIOLOGY STUDIES.

17                   AND YOU HAVE TO REMEMBER THAT  
18 ALTHOUGH, AND YOU HAVE HEARD FROM DR. HILL,  
19 DR. DOLL, THAT THERE ARE THESE EPIDEMIOLOGY STUDIES  
20 INDICATING AN ASSOCIATION BETWEEN SMOKING AND LUNG  
21 CANCER.

22                   THESE EPIDEMIOLOGY STUDIES  
23 NEEDED -- THE C. T. R. EPIDEMIOLOGY STUDIES NEEDED TO  
24 ADDRESS THE PROBLEM OF WHY IS IT THAT OF THE PEOPLE  
25 WHO SMOKE, 20 PERCENT DEVELOPED LUNG CANCER, 80  
26 PERCENT DON' T.

27                   WHY IS IT THAT THOSE 20 PERCENT END  
28 UP DEVELOPING LUNG CANCER AND 80 PERCENT OF THE

1 PEOPLE DON' T.

2 WHAT MAKES THOSE INDIVIDUALS  
3 DIFFERENT? WHY IS IT THAT -- HOW ARE THE 80  
4 PERCENT DIFFERENT FROM THE 20 PERCENT.

5 AND --

6 Q. HOW WAS THAT IMPORTANT IN  
7 UNDERSTANDING LUNG CANCER?

8 A. IT' S IMPORTANT IN TERMS OF TRYING  
9 TO UNDERSTAND WHAT ARE THE CAUSES OF LUNG CANCER.

10 WE HAVE SMOKING AS SOMETHING THAT' S  
11 ASSOCIATED WITH LUNG CANCER, BUT WHY IS IT 80  
12 PERCENT OF THE PEOPLE ARE PROTECTED, WHY ARE THE  
13 OTHER 20 PERCENT SUSCEPTIBLE FOR THE DEVELOPMENT OF  
14 LUNG CANCER?

15 WHAT ARE THE OTHER FACTORS?

16 ARE THERE OTHER FACTORS OUT THERE  
17 WHICH ARE MAKING THAT 80-20 DIFFERENCE.

18 SO THESE EPIDEMIOLOGY STUDIES WERE  
19 FOCUSING TRYING TO DETERMINE IF AND WHAT THE OTHER  
20 FACTOR MIGHT BE. IS IT AGE? IS IT OCCUPATION? IS  
21 IT PERSONALITY TYPE?

22 SO TRYING TO GET THEN AT WHAT  
23 DISTINGUISHES THE 80 PERCENT OF THE PEOPLE WHO  
24 DON' T DEVELOP LUNG CANCER FROM THE 20 PERCENT OF  
25 THE PEOPLE WHO DO DEVELOP LUNG CANCER, EVEN THOUGH  
26 ALL OF THEM ARE SMOKERS.

27 Q. AND THESE WERE EPIDEMIOLOGY STUDIES  
28 THAT WERE DONE BY C. T. R. GRANTEES AFTER THE DOLL

1 AND HILL STUDIES AND THE EARLIER ONES WE HEARD  
2 ABOUT?

3 A. YES, THEY ARE.

4 NEXT I HAVE LISTED CIGARETTE  
5 SMOKING COMPONENTS ANALYSIS.

6 AND WHAT YOU NEED TO UNDERSTAND IS  
7 THAT CIGARETTE SMOKE IS ACTUALLY VERY, VERY  
8 COMPLEX. TODAY WE KNOW THAT CIGARETTE SMOKE HAS  
9 PROBABLY SOMEWHERE BETWEEN 2,000 AND 4,000  
10 DIFFERENT COMPONENTS.

11 IF WE ARE GOING TO UNDERSTAND HOW  
12 CIGARETTE SMOKE IS INVOLVED IN LUNG CANCER, WE NEED  
13 TO UNDERSTAND WHAT IS IT IN CIGARETTE SMOKE THAT  
14 MAY BE TRIGGERING LUNG CANCER.

15 AND SO THE STUDIES THAT C. T. R.  
16 FUNDED WAS TO, ONE, TO LOOK AT THESE COMPONENTS,  
17 BUT ALSO TO BE ABLE TO, BE ABLE TO DEVELOP A  
18 UNIFORM CIGARETTE SMOKE SO THAT RESEARCHERS SUCH AS  
19 MYSELF WOULD BE USING THE SAME REAGENTS, IN OUR  
20 EXPERIMENTS AS SOMEONE ON THE OTHER SIDE OF THE  
21 COUNTRY.

22 Q. WHEN YOU SAY USING THE SAME  
23 REAGENTS, I AM NOT QUITE SURE WHAT THAT MEANS, BUT,  
24 ARE YOU SAYING THAT IT'S IMPORTANT THAT EVERYONE  
25 WHO IS TESTING SMOKE BE TESTING THE SAME SMOKE,  
26 ESSENTIALLY?

27 A. THAT THEY USE THE SAME UNIFORM TYPE  
28 OF SMOKE, SO YOU CAN REPRODUCE RESULTS.

1                   SO THAT WOULD BE CALLED A PURE  
2 REAGENT, A UNIFORMED CIGARETTE SMOKE.

3                   AND SO IN ORDER TO TRY TO FIGURE  
4 OUT WHAT THE BAD COMPONENTS ARE IN CIGARETTE SMOKE,  
5 ONE, YOU NEED TO KNOW WHAT THE COMPONENTS ARE AND  
6 THEN TWO YOU NEED SOMEBODY TO BE ABLE TO TEST THEM  
7 HOW DO YOU FIGURE OUT WHAT THE BAD COMPONENTS ARE.

8                   AND SO WITHIN THIS HEADING HERE,  
9 C. T. R. ALSO FUNDED SOME OF THE INITIAL STUDIES TO  
10 TRY TO FIGURE OUT WHAT THE BAD COMPONENTS WERE.

11                Q.     WHAT TIME PERIOD ARE WE TALKING  
12 ABOUT FOR THAT KIND OF STUDY?

13                A.     THIS IS TAKING PLACE IN THE '50'S  
14 AND '60'S.

15                Q.     ALL RIGHT.

16                A.     THE NEXT THING WE HAVE ON OUR LIST  
17 IS HUMAN AUTOPSY AND PATHOLOGY STUDIES.

18                   THESE STUDIES WERE FOCUSED ON  
19 TRYING TO UNDERSTAND WHAT ARE THE CHANGES THAT GO  
20 ON IN THE LUNG, WHICH MAY INDICATE THAT THE CELLS  
21 ARE GOING TO BECOME CANCEROUS.

22                   AND SO IN THIS STUDY, IT WAS  
23 CARRIED OUT IN 12 DIFFERENT STUDIES, WITH A WHOLE  
24 GROUP OF PATHOLOGISTS, AND THEY LOOKED AT 2,000  
25 DIFFERENT LUNG SAMPLES.

26                   AND THESE ARE LUNG SAMPLES WITH  
27 PEOPLE WHO, THEY ARE LUNG SAMPLES FROM SMOKERS.

28                   AND THE IDEA WAS TO ASK WHERE ARE

1 THE NORMAL CELLS, WHAT ARE THE ABNORMAL CELLS, HOW  
2 ARE THE CELLS STARTING TO CHANGE, AND HOW  
3 FREQUENTLY DO YOU SEE CARCINOMAS, THAT IS, CELLS  
4 THAT WE CAN RECOGNIZE AS BEING CANCEROUS CELLS.

5 AND WHAT THEY DISCOVERED WAS THAT  
6 THERE WAS NO UNIFORM WAY OF CLASSIFYING THESE  
7 CELLS. SO THE C. T. R. FUNDED PROJECT ENDED UP  
8 DEVELOPING A PROPER CLASSIFICATION. WE STILL USE  
9 THAT CLASSIFICATION NOW AND FROM THESE STUDIES,  
10 THEY THEN ATTEMPTED TO TRY TO CORRELATE THE CHANGES  
11 IN THE LUNGS CELLS AND WHETHER OR NOT THOSE CHANGES  
12 MIGHT BE PREDICTIVE OF AN INDIVIDUAL DEVELOPING  
13 LUNG CANCER.

14 Q. ALL RIGHT. SO C. T. R. FUNDED GRANTS  
15 THAT RESEARCHED PRE-CANCEROUS CHANGES IN LUNG  
16 TISSUE?

17 A. IN AN ATTEMPT TO IDENTIFY  
18 PRE-CANCEROUS CHANGES, YES.

19 AND DOWN HERE, THESE ARE ANIMAL  
20 MODEL EXPERIMENTS OR ANIMAL MODEL STUDIES. AND I  
21 AM GOING TO FOCUS FIRST ON THE SKIN PAINTING  
22 STUDIES.

23 SO REMEMBER BACK HERE WE'D LIKE TO  
24 FIND OUT WHAT THE BAD COMPONENTS ARE. HOW DO WE DO  
25 THAT? WE NEED SOMEBODY TO BE ABLE TO TEST IT AND  
26 ONE WAY IS TO GO BACK TO THE SKIN PAINTING  
27 EXPERIMENTS WHERE YOU ARE TAKING AN EXTRACT OF  
28 CIGARETTE SMOKE AND PAINTING IT ON THE BACKS OF

1 THESE LITTLE MICE.

2 C. T. R. FUNDED A LOT OF ANIMAL MODEL  
3 STUDIES. THE PROBLEM WITH THE SKIN PAINTING  
4 STUDIES IS THAT THESE ANIMALS AREN'T DEVELOPING  
5 LUNG CANCER. YOU ARE PAINTING SOMETHING ON THE  
6 BACKS OF MICE AND IT REALLY DOESN'T MIMIC THE  
7 PROBLEMS OF LUNG CANCER.

8 YOU WANT AN ANIMAL MODEL IN WHICH  
9 THE ANIMAL IS INHALING SMOKE AND ASKING NOW WHETHER  
10 OR NOT THE ANIMAL DEVELOPS LUNG CANCER.

11 Q. WELL, JUST STAYING WITH THE SKIN  
12 PAINTING FOR A MOMENT, ARE YOU FAMILIAR WITH THE  
13 BACH AND MOORE?

14 A. YES.

15 Q. WHO ARE THEY?

16 A. BACH AND MOORE WERE TWO C. T. R.  
17 RECIPIENTS, GRANT RECIPIENTS.

18 ONE OF THE PROBLEMS THAT THEY WERE  
19 FINDING WITH THE SKIN PAINTING EXPERIMENTS, SAY, OF  
20 WYNDER AND GRAHAM, WAS THAT IT WAS VERY DIFFICULT  
21 FOR THOSE EXPERIMENTS TO BE REPEATED BY OTHER  
22 RESEARCHERS.

23 AND THAT'S ONE OF THE THINGS THAT  
24 WE DO IN SCIENCE IS THAT IF SOMETHING REALLY IS  
25 TRUE, YOU SHOULD BE ABLE TO REPEAT IT AND OTHER  
26 PEOPLE SHOULD BE ABLE TO REPEAT IT AND YOU SHOULD  
27 BE ABLE TO GET THE SAME RESULTS.

28 WHAT BACH AND MOORE DID IS THEY

1 LOOKED AT WYNDER' S EXPERIMENTS AND WHAT THEY  
2 FIGURED OUT WAS THAT THE REASON WHY IT WAS  
3 DIFFICULT TO REPEAT WYNDER AND GRAHAM S EXPERIMENTS  
4 IS THAT CIGARETTE SMOKE IS REALLY A VERY WEAK  
5 CARCINOGEN.

6 WHAT BACH AND MOORE WERE ABLE TO DO  
7 WAS SHOW THAT IF YOU ADD TO THAT WEAK CARCINOGEN,  
8 THE CIGARETTE SMOKE, A CO-CARCINOGEN.

9 Q. WHAT' S A CO-CARCINOGEN?

10 A. A CO-CARCINOGEN IS SOMETHING THAT,  
11 IN AND OF ITSELF, IS NOT A CARCINOGEN, BUT IF YOU  
12 ADD IT TO A WEAK CARCINOGEN, NOW YOU GET A MUCH  
13 MORE PRONOUNCED EFFECT.

14 AND SO IN BACH AND MOORE' S  
15 EXPERIMENTS, THEY DID THE SKIN PAINTING EXPERIMENTS  
16 BUT THEY ADDED A CO-CARCINOGEN. AND WHAT THEY WERE  
17 ABLE TO DO NOW IS GET ANIMALS THAT DEVELOPED SKIN  
18 CANCER MUCH MORE QUICKLY. AND THEY WOULD HAVE MORE  
19 TUMORS AND THEY CAN ACTUALLY START TO QUANTITATE,  
20 THEY COULD ACTUALLY USE THESE SKIN PAINTING ASSAYS  
21 AS A WAY OF QUANTITATING THE AMOUNT OF BADNESS OR  
22 CANCEROUS GENES WHICH ARE IN THE COMPONENTS THEY  
23 WERE TESTING.

24 Q. ALL RIGHT. NOW, YOU MENTIONED  
25 THERE' S ANOTHER PART TO THESE ANIMAL MODEL  
26 EXPERIMENTS AND THAT' S SMOKE INHALATION TESTS?

27 A. YES.

28 SKIN PAINTING STUDIES DON' T MIMIC

1 WHAT HAPPENED IN A SMOKER. SO A LOT OF MONEY WAS  
2 SPENT TRYING TO DEVELOP CIGARETTE SMOKE INHALATION  
3 TESTS, THAT IS, USING ANIMALS, HAVING THEM INHALE  
4 SMOKE AND SEEING WHETHER OR NOT THOSE ANIMALS WOULD  
5 DEVELOP LUNG CANCER, CARCINOGENIC, CARCINOMAS, THE  
6 TYPE THAT HUMANS WOULD DEVELOP. AND EVEN TODAY WE  
7 DO NOT HAVE AN ANIMAL MODEL FOR SMOKE INHALATION IN  
8 THE DEVELOPMENT OF CARCINOMAS.

9 C. T. R. SPENT CLOSE TO 15 -- 13  
10 MILLION DOLLARS IN TRYING TO DEVELOP AN ANIMAL  
11 MODEL FOR THESE INHALATION TESTS. THEY FUNDED  
12 RESEARCHERS WHO DID IT IN RATS, MONKEYS, HAMSTERS,  
13 CHICKENS, DUCKS, BABOONS, THEY TRIED ALL SORTS OF  
14 ANIMALS AND WERE UNSUCCESSFUL.

15 AND AS OF TODAY, WE STILL DON'T  
16 HAVE A MODEL SYSTEM FOR THESE INHALATION STUDIES.

17 Q. DID THE SURGEON GENERAL EVER  
18 COMMENT ON THESE ANIMAL MODEL SMOKE INHALATION  
19 TESTS?

20 A. YES. IN THE '82 SURGEON GENERAL'S  
21 REPORT, HE SUMMARIZES THESE ATTEMPTS TO DEVELOP AN  
22 ANIMAL MODEL SYSTEM AND IN FACT, THE FINAL BOTTOM  
23 LINE IS THAT THERE'S BEEN A CONCERT EFFORT AND  
24 REALLY MORE MONEY SPENT IN DOING THESE TYPES OF  
25 STUDIES WOULD BE NOT VERY PRODUCTIVE. AND THE  
26 SUGGESTION WAS, BY THE SURGEON GENERAL, IS THAT THE  
27 TYPES OF STUDIES THAT SHOULD BE DONE NOW IS REALLY  
28 FOCUSING MORE ON THIS BASIC CELLULAR AND BIOMEDICAL

1 RESEARCH. THAT'S A MOUTHFUL.

2 WHAT DOES THAT MEAN? THAT MEANS  
3 START TO LOOK AT THE ACTUAL CELLS AND TO START TO  
4 LOOK AT THE GENES AND TO LOOK AT THIS AT THE  
5 MOLECULAR LEVEL.

6 Q. LET'S JUST GO BACK TO THE SURGEON  
7 GENERAL'S REPORT FOR A MOMENT.

8 DOES THAT DEPICT THE SURGEON  
9 GENERAL'S REPORT THAT YOU WERE REFERRING TO?

10 A. YES, IT DOES.

11 Q. THIS IS EXHIBIT 11058.

12

13 \* (EXHIBIT 11, 058,  
14 DEMONSTRATIVE, MARKED FOR I. D.)

15

16 Q BY MR. CARLTON: AND DID YOU READ  
17 THE FIRST TWO PARAGRAPHS THERE UNDER -- HAVE YOU  
18 READ THAT?

19 A. I THINK SO.

20 "TOBACCO CARCINOGENESIS HAS  
21 BEEN INTENSELY STUDIED FOR MORE THAN  
22 25 YEARS --"

23 Q. SLOW DOWN A BIT. THE COURT  
24 REPORTER HAS TO TAKE THIS ALL DOWN.

25 A. (READING)

26 " -- BY EPIDEMIOLOGISTS,  
27 CHEMISTS, BIOCHEMISTS, TOXICOLOGISTS  
28 AND PATHOLOGISTS. AS A RESULT, THERE

1 IS A MUCH EXPANDED KNOWLEDGE OF THE  
2 MAJOR FACTORS CONTRIBUTING TO THE  
3 TOXICITY AND CARCINOGENICITY OF  
4 CIGARETTE SMOKE. NONETHELESS,  
5 SIGNIFICANT GAPS IN THAT KNOWLEDGE  
6 REMAIN. BENIGN AND MALIGNANT TUMORS  
7 HAVE BEEN INDUCED -- INDUCED IN THE  
8 LARYNX -- "

9 Q. JUST BEFORE WE GO ON, THE LARYNX IS  
10 THE THROAT?

11 A. THE THROAT.  
12 "-- THE LARYNX OF HAMSTERS  
13 BY LONG-TERM EXPOSURE TO DILUTED  
14 CIGARETTE SMOKE. ATTEMPTS TO INDUCE  
15 SIGNIFICANT NUMBERS OF BRONCHOGENIC  
16 CARCINOMA IN LABORATORY ANIMALS WERE  
17 NEGATIVE. "

18 Q. IS BRONCHOGENIC CARCINOMA ANOTHER  
19 TERM FOR LUNG CANCER?

20 A. IT IS THE TYPE OF LUNG CANCER WHICH  
21 IS ASSOCIATED WITH SMOKING.

22 Q. ALL RIGHT.

23 A. (READING)  
24 "-- IN LABORATORY ANIMALS  
25 WERE NEGATIVE IN SPITE OF MAJOR  
26 EFFORTS WITH SPECIAL SPECIES AND  
27 STRAINS, NEITHER RATS NOR HAMSTERS NOR  
28 BABOONS INHALE CIGARETTE SMOKE AS

1 DEEPLY AND AS INTENSELY AS  
2 CIGARETTE -- AS THE CIGARETTE SMOKERS  
3 WHO HAVE PROVIDED THE DATA WITH THE  
4 CONSEQUENCES THAT THEIR, QUOTE,  
5 EXPERIMENT IN THE FORM OF CLINICAL  
6 EVIDENCE GATHERED BY EPIDEMIOLOGISTS.  
7 IN THE VIEW OF THIS COMPELLING  
8 EVIDENCE, IT APPEARS THAT THE  
9 EXPERIMENTAL INDUCTION OF BRONCHOGENIC  
10 CARCINOMA SHOULD RECEIVE LIMITED  
11 PRIORITY AS A RESEARCH GOAL. "

12 Q. SO TO SORT OF SUMMARIZE WHAT THE  
13 SURGEON GENERAL WAS SAYING THERE, HE WAS  
14 RECOMMENDING THAT THEY MOVE ON FROM ANIMAL  
15 INHALATION EXPERIMENTS; RIGHT?

16 A. CORRECT.

17 Q. AND WHAT WAS THE SURGEON GENERAL  
18 RECOMMENDING BE DONE?

19 A. THE SURGEON GENERAL RECOMMENDED  
20 THAT REALLY THE FOCUS SHOULD BE MORE ON A CELLULAR,  
21 LOOKING AT THIS ON A CELLULAR LEVEL, LOOKING AT THE  
22 SPECIFIC CELLS AND ON A MOLECULAR LEVEL IN TERMS OF  
23 LOOKING AT WHAT GENES ARE INVOLVED IN THIS PROCESS.

24 Q. HAD C. T. R. ALREADY BEEN DOING THAT?

25 A. YES. THIS IS AN EXCERPT FROM THE  
26 1960 C. T. R. ANNUAL REPORT. AND WHAT'S BEEN  
27 HIGHLIGHTED UP HERE IS THEIR ANNOUNCEMENT THAT YOU  
28 MUST CONTINUE TO PROMOTE TRULY BASIC RESEARCH IN

1 THE INTRACELLULAR PROCESSES OF LIFE. AND IN THE  
2 MULTI-CELLULAR LIVING ORGANIZATION EVEN THOUGH IN  
3 SOME INSTANCES, THIS WILL HAVE NO OBVIOUS OR  
4 IMMEDIATE CONNECTION WITH THE PRACTICAL QUESTION OF  
5 TOBACCO AND HEALTH.

6 Q. BEFORE WE GO ON WITH THIS, THIS  
7 EXHIBIT IS 11059.

8  
9 \* (EXHIBIT 11, 059,  
10 DEMONSTRATIVE, MARKED FOR I. D.)

11

12 Q BY MR. CARLTON: ALL RIGHT. SO  
13 YOU READ US A QUOTE FROM THE 1960 C. T. R. ANNUAL  
14 REPORT. WHAT DOES THAT MEAN?

15 WHAT DID YOU JUST READ TO US?

16 A. WHAT THIS MEANS IS THAT, THAT THEY  
17 ARE GOING TO START TO FUND RESEARCH WHICH IS GOING  
18 TO LOOK AT LUNG CANCER NOT THROUGH EPIDEMIOLOGY  
19 STUDIES, BUT LOOK AT LUNG CANCER IN TERMS OF THE  
20 CELLS THAT ARE INVOLVED AND START TO LOOK AT WHAT  
21 GENES ARE INVOLVED IN THIS PROCESS.

22 Q. SO IN 1960, C. T. R. WAS SAYING IT  
23 WAS GOING TO DO THE SAME KIND OF RESEARCH THAT THE  
24 SURGEON GENERAL WAS RECOMMENDING IN 1982?

25 A. CORRECT.

26 Q. ALL RIGHT. SO WE ARE BACK TO YOUR  
27 LIST OF THE RESEARCH THAT C. T. R. DID IN LUNG CANCER  
28 AND WE ARE TO THE FINAL ENTRY THERE, BASIC CELLULAR

1 AND MOLECULAR BIOMEDICAL RESEARCH.

2                               WHAT KIND OF RESEARCH DID C. T. R. DO  
3 IN THAT AREA?

4               A.     IN THIS AREA HERE, THIS NOW GOES  
5 BACK TO REALLY STARTING TO IDENTIFY WHAT HAPPENS  
6 WHEN CELLS GO BAD, WHAT HAPPENS WHEN CELLS BECOME  
7 CANCEROUS.

8                               WHAT PROGRAMS, WHAT GENES HAVE TO  
9 GO WRONG IN ORDER FOR A CELL TO BECOME CANCEROUS?  
10 WHAT ARE THE THINGS, ARE THE OTHER THINGS THAT  
11 HAPPEN IN THE BODY IN ORDER FOR THE CELLS TO  
12 ACTUALLY BECOME A MALIGNANT CANCER.

13                               AND SO WE ARE GETTING TO MORE  
14 MOLECULAR AND CELLULAR STUDIES, AND THIS, IN PART,  
15 WAS IN KEEPING WITH THE DEVELOPMENT OF NEW  
16 TECHNOLOGY WHICH ACTUALLY ALLOWED US TO BE ABLE TO  
17 CLONE GENES AND TO START TO MANIPULATE GENES.

18               Q.     OKAY. I THINK, WAS C. T. R. A BIT  
19 AHEAD OF ITS TIME IN THIS RESPECT?

20               A.     YES, IT WAS. IT WAS, BUT I THINK  
21 THAT WAS DUE TO THE EXPERIENCE OF THE MEMBERS ON  
22 THE S. A. B.

23               Q.     NOW, WHAT I'D LIKE TO DO IS TO GO  
24 BACK TO THE BOARD THERE TO YOUR LEFT, BUT IT MIGHT  
25 BE A LITTLE EASIER FOR EVERYBODY IF WE ALSO PULL IT  
26 UP HERE, AND I THINK -- THERE IT IS.

27                               CAN YOU, LOOKING AT THIS, TELL US A  
28 LITTLE BIT ABOUT RESEARCH THAT C. T. R. FUNDED IN THE

1 DIFFERENT AREAS THAT YOU HAVE TOLD US ABOUT?

2 A. OKAY. THIS MAY BE A LITTLE  
3 TECHNICAL BUT LET'S SEE HOW WE DO HERE.

4 WE TALKED BACK HERE ABOUT NEEDING  
5 TO GET CELL MUTATIONS. AND PART OF WHAT C. T. R.  
6 FUNDED --

7 Q. LET ME STOP YOU FOR A SECOND. WHEN  
8 YOU SAY "NEEDING TO GET CELL MUTATIONS," DO YOU  
9 MEAN THAT YOU CAN'T HAVE CANCER UNLESS YOU HAVE  
10 CELL MUTATIONS?

11 A. CORRECT.

12 Q. OKAY?

13 A. SO AT THE START OF THIS PROCESS,  
14 THE DEVELOPMENT OF CANCER, CELL MUTATIONS NEED TO  
15 OCCUR.

16 C. T. R. FUNDED RESEARCH INTO  
17 UNDERSTANDING HOW THAT OCCURS, HOW DO THOSE  
18 MUTATIONS OCCUR.

19 AND FOR EXAMPLE, DR. BENEDICT, WHO  
20 WAS HERE AT USC, WHAT HE NOTED WAS THAT IF YOU LOOK  
21 AT LUNG CANCER CELLS, NOT IN THE PATIENT, BUT FROM  
22 A BIOPSY, LOOK AT THOSE CELLS ON A TISSUE CULTURE  
23 PLATE THAT YOU ARE GROWING THEM IN CULTURE, THAT  
24 THOSE CELLS HAD THIS GROSS CHROMOSOMAL  
25 REARRANGEMENTS.

26 THAT JUST MEANS THAT THE DNA HAS  
27 MADE SOME BIG CHANGES.

28 THOSE BIG CHANGES CONTRIBUTED TO

1 THESE CELL MUTATIONS.

2 BUT HE CARRIED ON THOSE STUDIES  
3 FUNDED BY C. T. R. TO SHOW THAT IF HE HAD RATS THAT  
4 HAD BEEN TAKING IN CIGARETTE SMOKE FOR LONG PERIODS  
5 OF TIME, HE COULD NOW FIND CELLS IN THE RAT THAT  
6 HAD THESE SAME GROSS CHROMOSOMAL CHANGES.

7 SO THIS STARTS TO PROVIDE A DIRECT  
8 LINK BETWEEN CIGARETTE SMOKING AND THIS PROCESS OF  
9 CANCER.

10 BUT REMEMBER, WE ARE ONLY UP HERE,  
11 A LOT OF OTHER THINGS NEED TO HAPPEN.

12 C. T. R. FUNDED RESEARCH INTO WHAT  
13 ARE CALLED DNA ADDUCTS, THAT IS, DNA. SO THIS IS  
14 THE DNA. IF YOU HAVE CHEMICALS WHICH SORT OF STICK  
15 ON TO THE DNA, THAT'S A BAD THING AND THAT'S CALLED  
16 A DNA ADDUCT.

17 AND THAT'S OKAY PROVIDED THE CELL  
18 DOESN'T DIVIDE, THE DNA DOESN'T TRY TO REPLICATE.  
19 BUT IF THE DNA REPLICATES, THAT ADDUCT, THIS CLUMP  
20 OF CHEMICALS STUCK HERE IS GOING TO CAUSE  
21 MUTATIONS.

22 SO THIS GETS BACK IN TO HOW DO WE  
23 MAKE THESE CELL MUTATIONS.

24 AND C. T. R. FUNDED RESEARCH SHOWED  
25 THAT IF YOU HAD MICE THAT WERE TAKING IN CIGARETTE  
26 SMOKE FOR LONG PERIODS OF TIME, THAT THEY COULD BE  
27 FOUND IN THOSE MICE NOW AN INCREASE IN THESE DNA  
28 ADDUCTS, THE FACT OF HAVING CHEMICALS STUCK TO THE

1 DNA.

2 SO THAT PROVIDES US ANOTHER CLUE  
3 THEN AS TO HOW THESE CELL MUTATIONS ARE BEING MADE.

4 Q. SO IF THERE ARE DNA ADDUCTS, THAT'S  
5 A SIGN THAT YOU MAY BE GOING DOWN THE ROAD TOWARDS  
6 CANCER?

7 A. IT'S A SIGN THAT YOU ARE GOING TO  
8 MAKE DNA MUTATIONS, DNA MUTATIONS ARE NECESSARY TO  
9 GO DOWN THIS PATHWAY.

10 Q. AND CERTAIN DNA ADDUCTS ARE  
11 CONNECTED WITH SMOKING?

12 A. WE NOW KNOW THAT THERE'S A HIGH  
13 CORRELATION OF CERTAIN DNA ADDICTS THROUGH SMOKING,  
14 BASED ON WORK THAT WAS FUNDED BY C. T. R.

15 WE ARE GOING TO GET THESE CELL  
16 MUTATIONS HERE. WITH THESE MUTATIONS THEN, WE HAVE  
17 GONE BACK TO THE CELL DIVISION PROGRAM SO NOW THE  
18 CELLS ARE DIVIDING, THEY ARE DOING A LOT OF CELL  
19 DIVIDING. SOMETIMES THE DNA IS MAKING MISTAKES AND  
20 NORMALLY THEN WE WOULD GET THE CELL DEATH PROGRAM  
21 TURNED ON.

22 C. T. R. DID A LOT OF RESEARCH TO  
23 IDENTIFY THOSE CELL DEATH GENES AND WHAT WE NOW  
24 KNOW IS THAT IN A CANCER, LUNG CANCER CELL, THAT  
25 THE CELL DEATH GENES HAVE BEEN TURNED OFF.

26 AND SO AS THESE CELLS PROLIFERATE,  
27 THEY ARE MAKING MORE AND MORE DNA MUTATIONS, BUT  
28 THE CELL DEATH GENES ARE TURNED OFF, SO THE CELL

1 DOESN' T DIE. THE CELL DIVISION PROGRAM IS RUNNING  
2 RAMPANT, IT NO LONGER NEEDS GROWTH FACTORS TO COACH  
3 IT ALONG, AND SO WE GET THE FORMATION THEN OF THESE  
4 LITTLE TUMDRS.

5 AND C. T. R. RECIPIENTS WORKED ON  
6 IDENTIFYING THE GENES WHICH ARE INVOLVED IN THE  
7 CELL DIVISION AND SOME OF THOSE GENES ARE CALLED  
8 TUMDR SUPPRESSOR GENES WHICH MEANS THAT WHEN THEY  
9 WORK, THEY SUPPRESS TUMDRS. WHEN THEY DON' T WORK,  
10 WHEN THEY ARE BROKEN, BECAUSE OF CELL MUTATIONS,  
11 CELL DIVISION JUST CONTINUES ON AND IT' S NOT BEING  
12 CONTROLLED.

13 C. T. R. RECIPIENTS WORKED ON  
14 IDENTIFYING THOSE PARTICULAR GENES.

15 IN ADDITION THEN WE ALSO HAVE THOSE  
16 ONCOGENES WE TALKED ABOUT EARLIER. THOSE ARE THOSE  
17 GENES WHICH ARE SOMETIMES FOUND IN VIRUSES. C. T. R.  
18 RECIPIENTS WERE INVOLVED IN IDENTIFYING THOUGH  
19 ONCOGENES.

20 PETER VOGT, FOR EXAMPLE, WHO IS  
21 HERE AT USC, WORKED ON IDENTIFYING THOSE. HENRY  
22 BOSE AT UNIVERSITY OF TEXAS WAS INVOLVED IN  
23 IDENTIFYING THOSE GENES.

24 SHELLY BERGER AT M I. T. IDENTIFIED  
25 SOME OF THESE GENES.

26 Q. ARE THESE ALL C. T. R. GRANTEES?

27 A. THESE ARE ALL C. T. R. GRANTEES.

28 SO WE ALSO TALKED ABOUT THAT ONCE.

1 THE LITTLE TUMOR GETS TO BE ABOUT THE SIZE OF A PIN  
2 HEAD, THAT WE NEED NUTRIENTS, WE NEED  
3 VASCULARIZATION.

4 C. T. R. RECIPIENTS WERE INVOLVED IN  
5 IDENTIFYING GROWTH FACTORS THAT ARE MADE BY TUMOR  
6 CELLS WHICH ARE NECESSARY TO CONVINCING THE ADJACENT  
7 CELLS TO START TO MAKE CAPILLARIES SO THAT THE  
8 NUTRIENT CAN GET IN.

9 AS WE GO DOWN THROUGH THIS,  
10 REMEMBER, WE SAID THAT THE TUMOR CELLS, IN ORDER TO  
11 ESCAPE THE ENVELOPE, HAVE TO MAKE SOME SPECIAL  
12 PROTEINS.

13 ONE OF THOSE PROTEINS IS UROKINASE.

14 Q. SPELL THAT FOR THE COURT REPORTER.

15 A. U-R-O-K-I-N-A-S-E.

16 THAT PROTEIN WAS IDENTIFIED BY A  
17 C. T. R. RECIPIENT.

18 OKAY, SO WE BREAKDOWN THE CELL, THE  
19 ENVELOPE, NOW THAT THESE CELLS CAN ESCAPE INTO THE  
20 BLOOD STREAM AND WE SAID THAT NORMALLY THE IMMUNE  
21 SYSTEM CAN IDENTIFY THE TUMOR CELLS AND DESTROY  
22 THEM

23 C. T. R. RECIPIENTS WERE INVOLVED IN  
24 IDENTIFYING HOW DOES THE IMMUNE SYSTEM WORK, FOR  
25 EXAMPLE.

26 DR. BONO ANOTHER MOUNT SINAI  
27 HOSPITAL WORKED ON ONE GENE CALLED MTH EATEN,  
28 FUNNY SOUNDING GENE, BUT IT'S ONE IN WHICH THE

1 IMMUNE SYSTEM OF THE MOUTH DOESN' T WORK VERY WELL  
2 AND THAT PROVIDED CLUES AS TO HOW THE IMMUNE CELLS  
3 ARE IDENTIFYING THESE CANCER CELLS.

4 IN ADDITION, WE TALKED ABOUT THE  
5 FACT THAT THERE ARE -- THAT THE TUMOR CELLS  
6 SOMETIMES CAN DISGUISE ITSELF FROM THE IMMUNE  
7 CELLS. WHAT IT DOES IS IT NO LONGER MAKES A  
8 SPECIAL PROTEIN WHICH IS CALLED THE H. N. C.  
9 PROTEINS. C. T. R. RECIPIENTS WERE ABLE TO SHOW THAT  
10 IF YOU LOOK AT A LUNG CANCER CELL, THEY NO LONGER  
11 MAKE THAT PROTEIN.

12 SO THAT'S HOW THE LUNG CANCER CELLS  
13 IN THE BODY ARE ESCAPING DETECTION.

14 SO THESE CELLS THEN CAN ESCAPE THE  
15 IMMUNE SYSTEM, WIGGLE OUT OF THE CAPILLARIES AND  
16 CAUSE METASTASES IN OTHER PLACES.

17 DR. JOHN MINNA, ANOTHER C. T. R.  
18 RECIPIENT, WAS ABLE TO PUT TOGETHER A LOT OF THIS  
19 INFORMATION.

20 HE WAS ABLE TO SHOW THAT THOSE  
21 TUMOR CELLS, THE MOST MALIGNANT TYPE OF LUNG CANCER  
22 CELLS, HAVE TWO DIFFERENT TYPES OF RECEPTORS,  
23 LITTLE PROTEINS THAT DECORATE THE OUTSIDE OF THE  
24 TUMOR CELL.

25 THOSE RECEPTORS ARE OPIATE  
26 RECEPTORS AND NICOTINE RECEPTORS.

27 AND WHAT HE WAS ABLE TO DEMONSTRATE  
28 IS IN THAT TUMOR CELL, REMEMBER, THE CELL DEATH

1 GENES ARE TURNED OFF. AND HE WAS ABLE TO SHOW THAT  
2 BY ADDING TO HIS CULTURE OF CELLS SPECIAL COMPOUNDS  
3 THAT WOULD BIND TO THE OPIATE RECEPTOR, THAT HE  
4 COULD NOW THEN TURN BACK ON THE CELL DEATH GENES  
5 AND CAUSE THE CELLS TO DIE.

6 AND SO C. T. R. RECIPIENTS ARE ALL  
7 PUTTING TOGETHER LITTLE BITS OF INFORMATION WHICH  
8 ARE NOW BEING PUT TOGETHER IN UNDERSTANDING WHY IS  
9 IT, WHAT ARE THE CELL MUTATIONS THAT NEED TO OCCUR.  
10 AND THERE' S LOTS AND LOTS OF DIFFERENT SORTS, WHAT  
11 ARE THE OTHER EVENTS THAT NEED TO OCCUR, IN ORDER  
12 FOR THIS ENTIRE PROCESS TO HAPPEN IN THE  
13 METASTASIS.

14 Q. WERE C. T. R. GRANTEES, WAS THE  
15 RESEARCH THEY DID SIGNIFICANT IN DEVELOPING OUR  
16 UNDERSTANDING OF EACH OF THESE STEPS?

17 A. YES, IT CERTAINLY WAS, BECAUSE THEY  
18 WERE VERY MUCH FOCUSED IN LOOKING AT THINGS,  
19 SPECIFICALLY LUNG CANCER AS OPPOSED TO CANCER IN  
20 GENERAL.

21 Q. NOW, WOULD IT BE FAIR TO SAY THAT  
22 IF YOU WANTED TO UNDERSTAND HOW SMOKING CAUSES LUNG  
23 CANCER, YOU FIRST HAVE TO UNDERSTAND HOW LUNG  
24 CANCER IS CAUSED?

25 A. ABSOLUTELY. I THINK YOU CAN SEE  
26 THAT THIS IS SUCH A LONG PROCESS. REMEMBER, WHAT  
27 IS IT, 30 TO 40 YEARS BEFORE YOU DEVELOP LUNG  
28 CANCER. THIS IS A VERY LONG PROCESS, AND YOU NEED

1 TO UNDERSTAND THE INDIVIDUAL STEPS BEFORE YOU CAN  
2 START TO IDENTIFY WHAT THE CAUSAL AGENTS ARE.

3 Q. AND SMOKING MAY BE RELATED TO ONE,  
4 MORE OR EVEN ALL OF THOSE STEPS; IS THAT CORRECT?

5 A. THERE' S A GOOD POSSIBILITY OF THAT.

6 Q. SO IF YOU WANTED TO FIGURE OUT HOW  
7 TO FIX IT, TO FIX SMOKING, YOU WOULD HAVE TO KNOW  
8 WHICH OF THESE STEPS DOES SMOKING EFFECT?

9 A. YES. YES.

10 Q. THANK YOU.

11 IN YOUR OPINION WAS THE RESEARCH  
12 PROGRAM FUNDED BY C. T. R. A RESPONSIBLE RESEARCH  
13 PROGRAM?

14 A. YES, IT WAS.

15 Q. DID IT FUND RESEARCH THAT WAS  
16 RELEVANT TO THE ISSUE OF SMOKING AND HEALTH?

17 A. YES, IT DID.

18 Q. WAS IT RESEARCH THAT WAS  
19 APPROPRIATE FOR THE TIME IN WHICH IT WAS FUNDED?

20 A. YES. NOT ONLY APPROPRIATE BUT  
21 OFTENTIMES THEY WERE THE LEADERS IN OPENING NEW  
22 AVENUES TO OUR UNDERSTANDING OF CANCER.

23 Q. DID C. T. R. GRANTEES GET MONEY FROM  
24 OTHER SOURCES THAT ALSO CONTRIBUTED TO THEIR WORK?

25 A. YES, THEY CERTAINLY DID.

26 OTHER SOURCES SUCH AS THE AMERICAN  
27 CANCER SOCIETY, THE NATIONAL CANCER INSTITUTION.  
28 OTHER FUNDING AGENCIES WITHIN THE NATIONAL

1 INSTITUTES OF HEALTH, NATIONAL SCIENCE FOUNDATION,  
2 DAIMON RUNYON, ANNAFORD FORD, A VARIETY OF  
3 DIFFERENT BIOMEDICAL FUNDING AGENCIES.

4 Q. NOW, SOME OF THE RESEARCH YOU HAVE  
5 ALREADY TOLD US ABOUT, WOULD YOU CHARACTERIZE IT  
6 AS, PERHAPS, FIRING UP A LINK BETWEEN SMOKING AND  
7 LUNG CANCER?

8 A. SOME OF THE RESEARCH STARTS TO  
9 SOUND -- THE RESEARCH TELLS US WHAT THE STEPS ARE  
10 AND FROM THAT WE CAN START TO DEDUCE THE  
11 ASSOCIATION OF SMOKING WITH LUNG CANCER.

12 Q. ALL RIGHT. THIS WASN' T RESEARCH  
13 THAT WAS ONLY FAVORABLE TO THE TOBACCO COMPANIES,  
14 WAS IT?

15 A. NO.

16 Q. AND UNTIL THE COURSE OF YOUR  
17 LOOKING THROUGH THE RESEARCH THAT WAS FUNDED AND  
18 PUBLISHED BY C. T. R. , DID YOU FIND EXAMPLES, OTHER  
19 EXAMPLES OF RESEARCH THAT WAS, PERHAPS, NOT  
20 FAVORABLE TO THE TOBACCO COMPANIES?

21 A. YES, I DID.

22 Q. AND DID YOU SELECT A FEW OF THOSE  
23 FOR US TO TALK ABOUT?

24 A. YES, I DID.

25 Q. HERE' S A DEMONSTRATIVE THAT YOU  
26 HAVE PREPARED AND I BELIEVE THIS IS 11, 060.

27 /// /// ///

28 /// /// ///

1                                   \* (EXHIBIT 11, 060,  
2                                   DEMONSTRATIVE, MARKED FOR I. D.)

3

4                   Q     BY MR. CARLTON: CAN YOU TELL US  
5 ABOUT THIS. AND AGAIN, I DON'T KNOW IF YOU CAN  
6 READ IT FROM WHERE YOU ARE.

7                   A.    NO, I THINK THIS IS FINE.  
8                                   THIS IS AN EPIDEMIOLOGY STUDY THAT  
9 WAS CARRIED OUT BY DOCTOR WARNER, AND WHAT HE IS  
10 SHOWING IS THAT THEY CAN MAKE A CORRELATION BETWEEN  
11 CHANGES IN THE LUNG, CHANGE IN THE LUNG CELLS WITH  
12 THE INCIDENTS OF BRONCHIOGENIC CARCINOMA.

13                  Q.    WHAT DOES THAT MEAN?

14                  A.    WHAT THAT MEANS IS THAT THEY CAN  
15 START TO IDENTIFY THE CELLS WHICH MAY BE PREDICTORS  
16 OF LUNG CANCER AND THE FACT THAT THEY FIND THAT  
17 THESE PREDICTIVE CELLS ARE PRESENT MORE EFFECTIVELY  
18 IN SMOKERS THAN IN NON-SMOKERS.

19                  Q.    I SEE. AND HERE'S ANOTHER STUDY.  
20 THIS IS EXHIBIT 1106 -- 11, 061.

21

22                                   \* (EXHIBIT 11, 061,  
23                                   DEMONSTRATIVE, MARKED FOR I. D.)

24

25                  Q     BY MR. CARLTON: WHAT IS THIS  
26 STUDY?

27                  A.    IN THIS PARTICULAR STUDY, WE ARE  
28 LOOKING AT CELLS WHICH ARE BEING GROWN IN THE

1 LABORATORY AND WHAT THEY FIND IS THAT CERTAIN PARTS  
2 OF THE CIGARETTE SMOKE CAN MAKE THOSE CELLS THAT  
3 ARE BEING GROWN IN THE LABORATORY, CAN MAKE THOSE  
4 CELLS TRANSFORM

5 AND WHAT WE MEAN BY TRANSFORM  
6 TRANSFORM, TRANSFORMED CELLS ARE CELLS WHICH ARE ON  
7 THEIR WAY TO BECOMING CANCEROUS CELLS.

8 IF A CELL IS TRANSFORMED, IT MEANS  
9 THAT IT IS DIVIDING IN A WAY THAT IT IS NO LONGER  
10 REGULATED BY EXTERNAL SOURCES.

11 SO THIS IS ONE OF THE FIRST  
12 INDICATIONS THAT A CELL IS ON ITS WAY TO BECOMING A  
13 CANCER CELL.

14 Q. AND THAT LINKS IT TO CIGARETTE  
15 SMOKING, IN SOME FASHION?

16 A. IT LINKS IT NOT ONLY TO CIGARETTE  
17 SMOKING, BUT IT IS STARTING TO IDENTIFY WHAT  
18 PORTION OF CIGARETTE SMOKE MAY BE CAUSING THIS  
19 INITIAL TRANSFORMATION EFFECT.

20 Q. AND HERE'S ANOTHER STUDY. THIS  
21 APPEARS TO BE BY BENEDICT. I THINK YOU MENTIONED  
22 HIM BEFORE.

23 A. YES.

24 AND IN THIS PARTICULAR STUDY, WHAT  
25 HE WAS ABLE TO DEMONSTRATE WAS THAT IF MICE WERE  
26 EXPOSED TO WHOLE CIGARETTE SMOKE, THAT THEY COULD  
27 FIND IN THESE MICE THOSE GROSS CHROMOSOMAL CHANGES  
28 THAT I TALKED ABOUT. AND THOSE GROSS CHROMOSOMAL

1 CHANGES ARE THE SAME CHANGES THAT THEY SEE IN LUNG  
2 CANCER CELLS THAT THEY GET FROM BIOPSIES FROM LUNG  
3 CANCER PATIENTS.

4 Q. AND THAT WAS EXHIBIT 11, 062.

5

6 \* (EXHIBIT 11, 062,  
7 DEMONSTRATIVE, MARKED FOR I. D.)

8

9 Q BY MR. CARLTON: AND THEN LASTLY,  
10 CAN YOU TELL US ABOUT THIS STUDY WHICH WAS BY  
11 GIORDANO.

12 A. YES, THIS IS A RELATIVELY RECENT  
13 STUDY AND WHAT WE ARE LOOKING AT ARE PATIENTS WHO  
14 HAVE LUNG CANCER. SOME OF THOSE INDIVIDUALS SMOKED  
15 AND SOME OF THOSE INDIVIDUALS DID NOT SMOKE.

16 WHAT THEY ARE FINDING THERE IS THAT  
17 THERE IS A CORRELATION OF A PROTEIN CALLED P-53  
18 THAT YOU GET P-53 POSITIVE STAINING IN THE CELLS,  
19 THE LUNG CANCER CELLS OF THE SMOKERS IN 40 PERCENT  
20 OF THE TIME. AND YOU DON'T SEE THIS P-53 STAIN IN  
21 NON-SMOKERS.

22 NOW, I REALIZE THAT PROBABLY SOUNDS  
23 LIKE GOOBLY-GOOP. BUT WHAT THIS MEANS IS THAT THIS  
24 P-53 GENE WE NOW KNOW IS EFFECTIVE IN PROBABLY  
25 ONE-THIRD OF THE CANCERS THAT PEOPLE GET. SO IT'S  
26 A KEY IN THE DEVELOPMENT OF CANCER.

27 THIS STUDY TELLS US THAT THE P-53  
28 GENE MAY BE A TARGET OF CIGARETTE SMOKE AND MAY BE

1 CONTRIBUTING TO THE DEVELOPMENT OF LUNG CANCER  
2 BECAUSE CIGARETTE SMOKE IS TARGETING THE P-53 GENE,  
3 AT LEAST IN 40 PERCENT OF THESE LUNG CANCER CASES.

4 Q. AND THIS WAS A 1997 STUDY?

5 A. YES, IT IS.

6 Q. SO MUCH OF THIS MOLECULAR CELL  
7 RESEARCH IS FAIRLY RECENT?

8 A. YES, IT IS.

9 Q. YOU HAVE LOOKED THROUGH ALL OF  
10 THESE C. T. R. MATERIALS THAT YOU HAVE TOLD US ABOUT.  
11 YOU HAVE LOOKED THROUGH THE, SOME OF THE GRANT  
12 APPLICATIONS. YOU HAVE LOOKED THROUGH THE  
13 PUBLISHED RESEARCH.

14 DID YOU SEE ANY EVIDENCE THAT IN  
15 ITS SELECTION OF RESEARCH TO BE CONDUCTED AND THE  
16 GRANTS THAT IT APPROVED, THAT C. T. R. WAS BIASED IN  
17 SOME WAY AGAINST RESEARCH THAT MIGHT BE UNFAVORABLE  
18 TO THE TOBACCO INDUSTRY?

19 A. I SAW NO EVIDENCE OF THAT.

20 Q. YOU HAVE REVIEWED SURGEON GENERAL'S  
21 REPORTS, HAVEN'T YOU?

22 A. YES, I HAVE.

23 Q. THE '64 SURGEON GENERAL'S REPORT?

24 A. YES.

25 Q. OTHER SURGEON GENERAL'S REPORTS  
26 AFTER THAT, THE '82 AND THE '88. AND HAVE C. T. R.  
27 GRANTEE'S RESEARCH BEEN CITED BY THE SURGEON GENERAL  
28 IN THOSE REPORTS?

1           A.     YES, THEY HAVE.

2                     IN FACT, IN THE '64 REPORT, C. T. R.  
3 FUNDED RESEARCH IS CITED PROBABLY ABOUT 35 TIMES.  
4 THEY CITE 35 C. T. R. FUNDED RESEARCH REPORTS IN THE  
5 SURGEON GENERAL'S REPORT AND I WENT BACK TO LOOK AT  
6 THAT, TO ASK WHAT ARE THEY CITING. AND IN FACT  
7 THEY ARE CITING THIS TYPE OF DATA, NOT THIS IN '97,  
8 BUT DATA WHICH IS, COULD BE VIEWED AS BEING  
9 DETRIMENTAL TO THE TOBACCO COMPANIES.

10                    C. T. R. WAS CARRYING OUT GOOD  
11 RESEARCH AND WAS FUNDAMENTAL IN OUR UNDERSTANDING  
12 OF THE LINES BETWEEN LUNG CANCER AND CIGARETTE  
13 SMOKING.

14            Q.     BOTTOM LINE, WHAT'S YOUR OPINION  
15 ABOUT THE C. T. R. RESEARCH PROGRAM AND THE RESEARCH  
16 THAT IT FUNDED?

17            A.     WELL, THE BOTTOM LINE IS THAT THE  
18 RESEARCH PROGRAM REALLY WAS A BONA FIDE RESEARCH  
19 PROGRAM THE ADVISORY BOARD WAS ESTABLISHED THE  
20 SAME WAY THAT THE ADVISORY BOARDS HAD BEEN  
21 ESTABLISHED FOR N. I. H. , FOR EXAMPLE.

22                    THE MEMBERS OF THE ADVISORY BOARD  
23 WERE REALLY VERY WELL QUALIFIED INDIVIDUALS. THEY  
24 ARE EXPERTS IN THEIR FIELD.

25                    I THINK THAT EXPERTISE HAD A LOT TO  
26 DO WITH THEIR DEVELOPING THE RIGHT FOCAL POINTS FOR  
27 THE RESEARCH PROGRAM

28                    INITIALLY, THE EPIDEMIOLOGY

1 STUDIES, LATER THE MOUSE INHALATION STUDIES AND  
2 THEN REALLY FOCUSING VERY HEAVILY ON THE CELL AND  
3 MOLECULAR STUDIES.

4 WITH THAT KIND OF BACKGROUND THE  
5 GRANTS THAT CAME IN WERE REVIEWED IN A VERY  
6 PROFESSIONAL AND APPROPRIATE MANNER SIMILAR TO THE  
7 MANNER THAT GRANTS ARE REVIEWED IN OTHER BIOMEDICAL  
8 RESEARCH FUNDING ORGANIZATIONS.

9 THE TYPE OF RESEARCH THAT WAS  
10 FUNDED, THE QUALITY OF THE RESEARCH WAS EXTREMELY  
11 HIGH.

12 AND THAT'S ILLUSTRATED IN PART BY  
13 WHERE THE GRANT, WHERE THE RESEARCH RESULTS WERE  
14 PUBLISHED. THEY ARE PUBLISHED IN TOP TWO JOURNALS,  
15 WHERE THE RESEARCH WAS CARRIED OUT. IT WAS CARRIED  
16 OUT AT TOP UNIVERSITIES AND MEDICAL SCHOOLS. IT IS  
17 IN REFLECTION OF THE FACT THAT THE C. T. R.  
18 RECIPIENTS ALSO HAD FUNDING FROM THE AMERICAN  
19 CANCER SOCIETY, FROM THE NATIONAL INSTITUTES OF  
20 HEALTH.

21 TAKEN ALL TOGETHER, IT WAS A BONA  
22 FIDE RESEARCH PROGRAM THAT HAD A VERY POSITIVE  
23 IMPACT ON INVESTIGATORS AND ESPECIALLY YOUNG  
24 INVESTIGATORS IN THE BIOMEDICAL FIELD OF RESEARCH.

25 MR. CARLTON: THANK YOU. I HAVE NOTHING  
26 FURTHER.

27 THE COURT: THANK YOU, MR. CARLTON.

28 MR. PIUZE.

1 CROSS-EXAMINATION

2

3 BY MR. PIUZE:

4 Q. THERE ARE SOME PEOPLE THAT DISAGREE  
5 WITH YOU, THOUGH, AREN'T THERE?

6 MR. CARLTON: OBJECTION, VAGUE.

7 THE COURT: SUSTAINED.

8 Q BY MR. PIUZE: YOU ARE AWARE THAT  
9 THERE ARE PLENTY OF PEOPLE WHO DISAGREE WITH YOU  
10 ABOUT THE FACT THAT THE C. T. R. WAS A VALID  
11 OPERATION; RIGHT?

12 A. I AM SORRY, WHAT WAS THE QUESTION?

13 Q. YOU ARE AWARE THAT THERE ARE PLENTY  
14 OF PEOPLE WHO DISAGREE WITH YOU ON THE ISSUE OF  
15 WHETHER OR NOT THE C. T. R. WAS A VALID OPERATION?

16 A. NO, I AM NOT.

17 Q. WHO'S MR. MICHAELS?

18 A. MR. MICHAELS IS A LAWYER FOR THE  
19 COUNCIL FOR TOBACCO RESEARCH.

20 Q. IS HE HERE?

21 A. YES, HE IS.

22 Q. WHERE IS HE?

23 A. HE'S IN THE BACK OF THE ROOM

24 Q. WHICH ONE IS HE?

25 A. HE'S IN THE BACK OF THE ROOM, RIGHT  
26 BEHIND YOU.

27 Q. I THOUGHT THE COUNCIL FOR TOBACCO  
28 RESEARCH WAS ABOLISHED AT THE END OF 1997?

1 A. I THINK IT WAS.

2 Q. BY THE STATES' ATTORNEYS GENERAL OF  
3 THE UNITED STATES?

4 A. I DON'T KNOW.

5 Q. IF THE C. T. R. WAS ABOLISHED AT THE  
6 END OF 1997, HOW IS HE THE LAWYER FOR THE C. T. R. ,  
7 DO YOU KNOW?

8 MR. CARLTON: OBJECTION, LACK OF  
9 FOUNDATION, CALLS FOR SPECULATION.

10 THE COURT: DO YOU KNOW?

11 THE WITNESS: DO I KNOW --

12 THE COURT: RE-ASK THE QUESTION.

13 THE WITNESS: I AM SORRY.

14 Q BY MR. PIUZE: TELL YOU WHAT, I  
15 WILL WITHDRAW THE QUESTION.

16 HOW DID YOU FIRST MEET MR.  
17 MICHAELS?

18 A. I MET MR. MICHAELS IN LAS VEGAS  
19 WHEN THEY FLEW OUT TO MEET ME.

20 Q. THEY?

21 A. THEY.

22 Q. WHO "THEY"?

23 A. MR. MICHAELS AND MR. GREEN.

24 Q. FROM NEW YORK?

25 A. FROM NEW YORK.

26 Q. FROM A WALL STREET LAW FIRM?

27 A. I DON'T KNOW IF THEY ARE A WALL  
28 STREET LAW FIRM

- 1 Q. THE NAME?
- 2 A. PARDON?
- 3 Q. THE NAME?
- 4 A. OH, THE NAME, THE NAME OF THE LAW  
5 FIRM IS DEBAGOISE & PLIMPTON.
- 6 Q. HOW MANY TIMES HAVE THEY FLOWN OUT  
7 TO LAS VEGAS TO MEET YOU?
- 8 A. MR. MICHAELS HAS FLOWN OUT SEVERAL  
9 TIMES AND, I AM SORRY, I REALLY DON' T KNOW HOW MANY  
10 TIMES.
- 11 Q. GIVE US A ROUND NUMBER.
- 12 A. IN WHAT TIMEFRAME?
- 13 Q. SINCE THEY CONTACTED YOU.
- 14 A. OH, MAYBE SIX TO TEN TIMES.
- 15 Q. AND WHAT HAVE YOU DONE IN LAS VEGAS  
16 WHEN THEY HAVE FLOWN OUT TO MEET YOU?
- 17 A. WHEN MR. MICHAELS HAS FLOWN OUT TO  
18 MEET ME, WE HAVE DISCUSSED C. T. R. , WE HAVE  
19 DISCUSSED THE ISSUES OF HEALTH AND LUNG CANCER. WE  
20 HAVE TALKED ABOUT WHAT MY OPINIONS ARE OF C. T. R.  
21 AND C. T. R. RELATED ACTIVITIES.
- 22 Q. IS THAT IT?
- 23 A. AS BEST I CAN RECALL, YEAH.
- 24 Q. HE HAS PROVIDED YOU WITH A WHOLE  
25 BUNCH OF DOCUMENTS, HASN' T HE?
- 26 A. HE HAS PROVIDED ME WITH A WHOLE  
27 BUNCH OF DOCUMENTS THAT I REQUESTED.
- 28 Q. HE PROVIDED YOU WITH A WHOLE BUNCH

1 OF DOCUMENTS FROM THE MINNESOTA LITIGATION, DIDN' T  
2 HE?

3 A. MR. PIUZE, I AM A BIOLOGIST, AND I  
4 HAVE NOT BOTHERED TO KEEP TRACK OF ALL THESE TRIAL  
5 CASES. AND I DON' T KNOW THE DIFFERENCE BETWEEN  
6 AFFIDAVIT AND A TESTIMONY. SO PLEASE HELP ME OUT  
7 HERE.

8 Q. I WILL.  
9 AT YOUR DEPOSITION, THERE WAS  
10 SOMETHING MARKED AS EXHIBIT 1. AND EXHIBIT 1 WAS A  
11 LIST OF ALL OF THE STUFF THAT HE HAD GIVEN YOU;  
12 RIGHT?

13 A. YES.

14 Q. HERE IT IS, STARTING THERE, AND  
15 GOING FOR 15 PAGES' WORTH OF STUFF; RIGHT?

16 A. CORRECT.

17 Q. NOW, TAKE A LOOK IF YOU WOULD, AT  
18 PAGE 12. DO YOU SEE THAT?

19 A. ONE MOMENT, PLEASE.

20 Q. DO YOU SEE WHERE IT SAYS SELECTED  
21 TRIAL EXHIBITS FROM STATE OF MINNESOTA VERSUS  
22 PHILIP MORRIS?

23 A. NO, I AM ON PAGE 12 AND IT IS NOT  
24 HERE.

25 Q. 13. DO YOU SEE ALL THAT?

26 A. YES. THE DIFFICULTY WE ARE HAVING  
27 HERE IS THAT I DON' T RECOGNIZE THIS AS BEING STATE  
28 OF MINNESOTA. I HAVE THIS MARKED AS "DOCUMENTS. "

1 I DON'T HAVE THESE THINGS MEMDRIZED AS BEING FROM  
2 PARTICULAR TRIALS, THE WAY THAT YOU LAWYER SORTS  
3 DO.

4 Q. YOU DON'T HAVE TO.

5 A. OH, GOOD.

6 Q. BECAUSE THIS LAWYER SORT KNOWS WHAT  
7 I GOT.

8 ANYWAY, FROM THESE DOCUMENTS THAT  
9 YOU GOT LISTED THAT MR. MICHAELS GAVE YOU, ONE OF  
10 THE VERY EARLIEST DOCUMENTS IS FROM 1958. THIS IS  
11 BY A BRITISH GROUP VISITING THE UNITED STATES AND  
12 CANADA IN ORDER TO GET ATTITUDES ON LUNG CANCER AND  
13 SMOKING.

14 DO YOU KNOW THAT?

15 A. CAN I SEE THE FRONT COVER OF THIS  
16 ORIGINAL SET OF DOCUMENTS. IT WOULD HELP ME A LOT.

17 Q. REPORT ON VISIT TO U. S. A. AND  
18 CANADA, 17 APRIL THROUGH 12 MAY 1958.

19 DO YOU SEE THOSE AUTHORS THERE?

20 A. UH-HUH. AND WHAT COMPANY WERE THEY  
21 FOR?

22 Q. THEY WERE FROM ENGLAND.

23 A. WHAT COMPANY?

24 Q. I DON'T KNOW.

25 A. WHAT?

26 Q. I DON'T KNOW.

27 THIS IS ONE OF THE DOCUMENTS HE  
28 GAVE YOU. IT'S LISTED THERE. DIDN'T YOU READ IT?

1           A.    I HAVE READ A LOT OF DOCUMENTS.  SO  
2 IF YOU -- IF WE WANT TO TALK ABOUT THIS, IF YOU  
3 WILL HELP ME, I WOULD APPRECIATE IT.

4           Q.    I DO.  
5                   LIGGETT AND MEYERS, DO YOU KNOW  
6 WHAT THAT IS?

7           A.    YES, I DO.

8           Q.    WHAT?

9           A.    IT'S ONE OF THE TOBACCO COMPANIES.

10          Q.    (READING)  
11                   "LIGGETT AND MEYERS STAYED  
12 OUT OF T. I. R. C.  ORIGINALLY BECAUSE  
13 THEY DOUBTED THE SINCERITY OF T. I. R. C.  
14 ACTIVITIES AND BELIEVED THAT THE  
15 ORGANIZATION WAS TOO UNWELDY TO WORK  
16 EFFICIENTLY.

17                   "THEY REMAIN CONVINCED THAT  
18 THEIR MISGIVINGS WERE JUSTIFIED.  IN  
19 THEIR OPINION, T. I. R. C.  HAS DONE  
20 LITTLE, IF ANYTHING, CONSTRUCTIVE.  
21 THE CONSTANTLY REITERATED, NOT PROVEN  
22 STATEMENTS IN THE FACE OF MOUNTING  
23 CONTRARY EVIDENCE THAT HAS THOROUGHLY  
24 DISCREDITED T. I. R. C.  AND THE  
25 SCIENTIFIC ADVISORY BOARD OF T. I. R. C.  
26 AND SUPPORTING, ALMOST WITHOUT  
27 EXCEPTION, PRODUCTS WHICH ARE NOT  
28 RELATED DIRECTLY TO SMOKING AND LUNG

1           CANCER. "

2                           SO ANYWAY, MY TAKE-OFF QUESTION  
3 WAS, THERE WAS SOME PEOPLE THAT DISAGREED WITH YOU  
4 ABOUT YOUR VIEW OF THE T. I. R. C.   REMEMBER THAT?

5           A.     UH-HUH.

6           Q.     WEREN' T THERE?

7           A.     YES.

8           Q.     INCLUDING ONE OF THE UNITED STATES  
9 TOBACCO COMPANIES?

10          A.     WELL, THAT IS THE OPINION OF THE  
11 THREE GENTLEMEN FROM ENGLAND.

12          Q.     NO.   ACTUALLY, DOESN' T SAY THAT IS  
13 THE OPINION OF LIGGETT AND MEYERS THAT STAYED OUT  
14 OF T. I. R. C.  ORIGINALLY?

15          MR. CARLTON:  OBJECTION, HEARSAY.

16          THE COURT:  WELL, IT' S ONE PERSON  
17 DESCRIBING ANOTHER PERSON' S OPINION.

18          MR. PIUZE:  I WILL WITHDRAW THAT  
19 QUESTION.

20          Q     BY MR. PIUZE:  DID LIGGETT AND  
21 MEYERS STAY OUT OF T. I. R. C. ?

22          A.     ORIGINALLY, THEY DID.

23          Q.     IN 1958 -- MR. CLERK WHAT' S MY  
24 NEXT?

25          THE CLERK:  10, 016.

26          MR. CARLTON:  I WILL OBJECT TO THIS AS  
27 HEARSAY, LACK OF FOUNDATION.

28          THE COURT:  WELL, LET' S GO AHEAD AND

1 START WITH IT.

2 IF IT'S HEARSAY BUT, LIKE THE OTHER  
3 DOCUMENTS, IT'S SOMETHING THAT SHE REVIEWED, THEN  
4 IT COULD BE ADMISSIBLE FOR THE PURPOSES OF  
5 EXAMINING HER. I DON'T KNOW ANYTHING ABOUT THIS  
6 PARTICULAR DOCUMENT. FOUNDATION, PLEASE.

7 Q BY MR. PIUZE: THIS IS ONE OF THE  
8 DOCUMENTS, LISTED RIGHT THERE THAT YOU REVIEWED;  
9 RIGHT?

10 A. WAS THAT A QUESTION?

11 Q. YES.

12 A. YES.

13 THE COURT: PROCEED.

14 Q BY MR. PIUZE: SO 10,016, I AM  
15 GOING TO MAKE THE SMALL VERSION 10016, AND THIS  
16 BLOWUP 10,016 A.

17

18 \* (EXHIBITS 10,016 AND 10,016A,  
19 DEMONSTRATIVES, MARKED FOR I. D.)

20

21 Q BY MR. PIUZE: THESE PEOPLE WHO  
22 VISITED THE UNITED STATES AND CANADA IN 1958,  
23 REPORTED THAT WITH ONE EXCEPTION, EVERY SINGLE  
24 PERSON THEY KNOW BELIEVED THAT SMOKING CAUSED LUNG  
25 CANCER?

26 MR. CARLTON: OBJECTION, LACK OF  
27 RELEVANCE, BEYOND THE SCOPE.

28 THE COURT: THIS IS SOMETHING SHE

1 REVIEWED. SHE CAN BE EXAMINED ON IT.

2 Q BY MR. PIUZE: RIGHT?

3 A. RIGHT WHAT?

4 Q. THESE THREE PEOPLE WHO VISITED THE  
5 UNITED STATES --

6 A. COULD I ALSO SEE THE BOARD.

7 Q. THIS IS THE SAME THING.

8 I AM NOT TRYING TO USE MIRRORS.

9 THIS IS THE SAME THING. THE JURY IS WATCHING.

10 A. OKAY, GOOD.

11 YOU REALIZE THAT IT'S -- THAT'S

12 HARD TO READ AND THIS IS MUCH NICER TO READ.

13 Q. HERE, YOU CAN HAVE THIS ONE.

14 A. MAY I TAKE IT HOME?

15 Q. YES.

16 A. THANK YOU.

17 Q. (READING)

18 "WITH ONE EXCEPTION, THE  
19 INDIVIDUALS WHOM WE MET BELIEVED THAT  
20 SMOKING CAUSES LUNG CANCER. THERE IS  
21 NO SUPPORT FOR THE VIEW THAT IN THE  
22 SAME INDIVIDUAL, THE TENDENCY TO SMOKE  
23 AND TO BE SUSCEPTIBLE TO LUNG CANCER  
24 ARE EACH INDEPENDENTLY AN OUTWARD  
25 EXPRESSION OF SOME THIRD UNKNOWN  
26 FACTOR. "

27 SO WASN'T C. T. R. , YEARS, MAYBE  
28 DECADES AFTER THIS WAS WRITTEN, PROPOSING SOME OF

1 THESE VERY THEORIES?

2 A. I AM SORRY. I PHASED OUT, WHICH  
3 THEORIES ARE WE TALKING ABOUT HERE?

4 Q. THAT SMOKING DOESN'T CAUSE LUNG  
5 CANCER. LET'S START WITH THAT.

6 A. I THINK YOU WILL FIND THAT IF --  
7 EXCUSE ME, I THINK YOU WILL FIND THAT IF YOU LOOK  
8 AT THE RECORD OF C. T. R. , IN FACT, PROBABLY ABOUT  
9 THE '80'S ON, IT WAS THE PRESUMPTION THAT SMOKING  
10 DOES CAUSE LUNG CANCER AND THEY WERE DETERMINING  
11 HOW IT IS INVOLVED WITH CAUSING LUNG CANCER.

12 Q. FROM THE '80'S ON?

13 A. ABOUT IN THAT TIMEFRAME.

14 Q. OKAY, SO FAR WE ARE IN 1958.

15 A. THAT IS RIGHT.

16 Q. AND IT'S IMPORTANT FOR US HERE, AT  
17 LEAST FOR ME, REPRESENTING MR. BOEKEN, TO TALK  
18 ABOUT THE '50'S AND THE '60'S AND THE '70'S BEFORE  
19 WE EVEN GET TO THE '80'S; OKAY?

20 A. OKAY.

21 THE COURT: YOU DON'T NEED TO ANSWER. HE  
22 JUST MADE A STATEMENT.

23 Q BY MR. PIUZE: HERE'S ANOTHER ONE  
24 THAT'S ON YOUR LIST. THIS IS 1963.

25 A. WOULD YOU LIKE YOUR BOARD BACK?

26 Q. I THOUGHT YOU WANTED TO TAKE THAT  
27 TO LAS VEGAS.

28 A. SURE. DO YOU THINK THEY WILL LET

1 ME TAKE IT ON THE PLANE?

2 Q. THIS NEXT ONE THAT I AM SHOWING NOW  
3 WILL BE 1019.

4

5 \* (EXHIBIT 10, 019,  
6 DEMONSTRATIVE, MARKED FOR I. D.)

7

8 Q BY MR. PIUZE: FROM DURHAM, NORTH  
9 CAROLINA, THIS IS A PRESS RELEASE FROM THE TOBACCO  
10 INDUSTRY.

11 DO YOU KNOW WHO GEORGE ALLEN WAS?

12 A. WELL, IT SAYS ON THERE HE'S THE  
13 PRESIDENT OF THE TOBACCO INSTITUTE.

14 Q. DO YOU KNOW WHAT THE TOBACCO  
15 INSTITUTE IS?

16 A. YES.

17 Q. TELL THE JURY WHAT THE TOBACCO  
18 INSTITUTE IS.

19 A. I BELIEVE THAT THE TOBACCO  
20 INSTITUTE WAS THE ORGANIZATION THAT WAS DEALING  
21 WITH BEING A SPOKESMAN FOR THE TOBACCO INDUSTRY.

22 Q. THIS GUY GAVE A TALK IN DURHAM,  
23 NORTH CAROLINA. DO YOU SEE THAT?

24 A. YES.

25 Q. IS DURHAM, NORTH CAROLINA IN THE  
26 HEART OF WHERE TOBACCO IS PRODUCED, DO YOU KNOW?

27 A. I BELIEVE SO.

28 Q. I AM JUST GOING TO READ THIS OUT

1 LOUD.

2 "MR. ALLEN NOTED THE TOBACCO  
3 PEOPLE HAVE A DOUBLE INTEREST IN THIS  
4 MATTER. FIRST, AS HUMAN BEINGS, WE  
5 ARE INTERESTED IN THE HEALTH OF OUR  
6 FELLOW MAN. SECOND, WE HAVE A  
7 NATIONAL INTEREST IN THE FUTURE  
8 WELFARE OF OUR INDUSTRY AND OF THE  
9 INDUSTRY'S CUSTOMERS. "

10 MR. CARLTON: OBJECT TO RELEVANCE AND  
11 HEARSAY.

12 THE COURT: OVERRULED.

13 MR. PIUZE: (READING)

14 "WE DO KNOW THAT THE  
15 ORIGINAL THEORY ABOUT SMOKING AND LUNG  
16 CANCER, THE THEORY THAT SMOKE WAS A  
17 DIRECT CONTACT CARCINOGEN HAS  
18 VIRTUALLY BEEN ABANDONED. OTHER  
19 THEORIES ABOUT HOW SMOKING MIGHT BE  
20 INVOLVED ARE STILL THEORIES TO BE  
21 INVESTIGATED.

22 "WE DO KNOW THAT IN  
23 LABORATORIES AROUND THE WORLD,  
24 SCIENTISTS ARE INVESTIGATING MANY  
25 POSSIBLE FACTORS IN LUNG CANCER AND  
26 HEART DISEASE IN ADDITION TO SMOKING.  
27 THESE INCLUDE VIRUSES, PREVIOUS LUNG  
28 INFECTIONS, DIET, STRESS AND STRAIN,

1 ENVIRONMENTAL AND OCCUPATIONAL  
2 POLLUTANTS, AMONG MANY OTHERS.

3 "WE ALSO KNOW AND PEOPLE  
4 SOMETIMES FORGET, THAT THERE ARE SOME  
5 GOOD REASONS WHY THE THEORIES ABOUT  
6 SMOKING AND HEALTH PROBLEMS ARE OFTEN  
7 QUESTIONED BY RESPONSIBLE SCIENTISTS.  
8 AMONG THEM THE CASE AGAINST SMOKING  
9 STILL RESTS LARGELY ON STATISTICAL  
10 STUDIES WHOSE MEANINGS ARE QUESTIONED  
11 BY LEADING MEDICAL STATISTICIANS.

12 "INTENSIVE AND CLINICAL  
13 LABORATORY RESEARCH HAS FAILED TO  
14 PROVIDE THE VERIFICATION NECESSARY TO  
15 SHOW CAUSE AND EFFECT ROLE OF SMOKING,  
16 INHALATION OF TOBACCO SMOKE BY  
17 LABORATORY ANIMALS IN MANY EXPERIMENTS  
18 OVER THE YEAR, HAS CONSISTENTLY FAILED  
19 TO PRODUCE LUNG CANCER. "

20 IS THAT ACCURATE, BASED ON YOUR  
21 RESEARCH?

22 MR. CARLTON: OBJECTION, VAGUE, COMPOUND.

23 THE COURT: OVERRULED.

24 THE WITNESS: IS WHAT ACCURATE?

25 Q BY MR. PIUZE: THAT STATEMENT THAT  
26 I JUST READ THAT WAS HIGHLIGHT IN YELLOW?

27 A. YOU HAVE GOT SEVERAL DIFFERENT  
28 COMPONENTS IN THERE. IF YOU WANT TO GO THROUGH

1 THEM ONE BY ONE, I WOULD BE HAPPY TO DO THAT.

2 Q. I WILL WITHDRAW

3 "HE NOTED THAT THE TOBACCO

4 INDUSTRY HAS LONG BEEN A PRODUCTIVE

5 CONTRIBUTOR TO THE AMERICAN ECONOMY,

6 AND THAT IT EXISTS TO MEET A

7 WELL-ESTABLISHED CONSUMER DEMAND FOR

8 PRODUCTS THAT BRING PLEASURE AND

9 RELAXATION TO A LARGE NUMBER OF PEOPLE

10 IN THIS COUNTRY AND ABROAD. "

11 DO YOU HAPPEN TO KNOW WHEN THE

12 TOBACCO -- CIGARETTE TOBACCO INDUSTRY STARTED TO

13 EXIST?

14 A. NO.

15 MR. CARLTON: OBJECTION, BEYOND THE

16 SCOPE.

17 THE COURT: OVERRULED.

18 Q BY MR. PIUZE: YOU DON' T?

19 A. NO, I DON' T.

20 Q. HERS' S ANOTHER ONE FROM YOUR LIST,

21 10, 220.

22

23 \* (EXHIBIT 10, 220,

24 DEMONSTRATIVE, MARKED FOR I. D. )

25

26 Q BY MR. PIUZE: THIS IS FROM 1967

27 TO SENATOR CLEMENTS. DO YOU KNOW WHO SENATOR

28 CLEMENTS IS?



1 IT WAS THE RESULT OF AN AGREEMENT AMONG THE TOBACCO  
2 COMPANIES TO PROVIDE MONEY FOR BASIC RESEARCH INTO  
3 THE QUESTIONS OF HEALTH AND SMOKING.

4 THIS WAS -- THE DEVELOPMENT OF  
5 T. I. R. C. , THE IDEA OF HAVING THE TOBACCO COMPANIES  
6 CONTRIBUTE MONEY TO DOING THIS TYPE OF RESEARCH WAS  
7 NOT A NEW IDEA.

8 AND IN FACT, THE "NEW ENGLAND  
9 JOURNAL OF MEDICINE" IN 1953, I BELIEVE, HAD ALSO  
10 PUT A CALL OUT SUGGESTING THAT, IN FACT, THIS IS  
11 EXACTLY WHAT THE TOBACCO COMPANIES SHOULD BE DOING.

12 Q. DO YOU HAPPEN TO KNOW IF, AT ITS  
13 FOUNDING, THE TOBACCO INDUSTRY RESEARCH COUNCIL WAS  
14 HOUSED IN THE OFFICES OF THE HILL & KNOWLTON PUBLIC  
15 RELATIONS FIRM IN NEW YORK CITY?

16 A. YES, THEY WERE, WHEN THEY WERE  
17 GETTING STARTED.

18 Q. SO HERE' S DOCUMENT 11, 891.

19 "IN MY OPINION THE TOBACCO  
20 INDUSTRY HAS A VERY SERIOUS PROBLEM IN  
21 THE CURRENT TOBACCO HEALTH CONTROVERSY  
22 AND IT IS RAPIDLY BECOMING WORSE.  
23 PRIOR TO 1954, THE PROBLEM WAS MAINLY  
24 A PUBLIC RELATIONS PROBLEM AND OUR  
25 OPPONENTS HAD NO EFFECTIVE BASE TO  
26 WORK FROM IN DECEMBER OF 1953 WITH  
27 THE PUBLISHING OF THE WYNDER, GRAHAM  
28 AND CRONINGER PAPER, THIS PROBLEM NOT

1 ONLY INTENSIFIED, IT BECAME A  
2 SCIENTIFIC ONE. IN THE LAST 14 YEARS,  
3 THIS PROBLEM HAS BECOME MORE COMPLEX,  
4 MORE INVOLVED AND MUCH MORE SERIOUS.  
5 ALTHOUGH THIS PROBLEM HAS PUBLIC  
6 RELATIONS, BUSINESS, LEGAL AND  
7 POLITICAL COMPONENTS, IT IS BASICALLY  
8 A SCIENTIFIC ONE. SO FAR, HOWEVER,  
9 THE MAJOR EFFORTS OF INDUSTRY TO COPE  
10 WITH THIS PROBLEM HAVE BEEN OTHER THAN  
11 SCIENTIFIC. "

12 NOW, IN 1967, 14 YEARS AFTER THE  
13 T. I. R. C. WAS ESTABLISHED, THE MAJOR EFFORTS OF  
14 INDUSTRY TO COPE WITH THIS PROBLEM HAVE BEEN OTHER  
15 THAN SCIENTIFIC. AGREE OR DISAGREE?

16 A. AGREE OR DISAGREE TO WHAT? I DON'T  
17 KNOW WHAT HE IS REFERRING TO AT THE INDUSTRY.

18 Q. YOU DON'T KNOW WHAT INDUSTRY THIS  
19 PERSON IS REFERRING TO?

20 A. IF HE'S REFERRING TO THE TOBACCO  
21 INDUSTRY, YEAH.

22 Q. OF COURSE.

23 A. OKAY.

24 I DON'T KNOW WHAT THIS PROBLEM IS  
25 HE IS REFERRING TO.

26 THIS IS A MEMO WHICH IS, I BELIEVE,  
27 IF WE COULD LOOK AT THE TOP, I BELIEVE IF WE COULD  
28 LOOK AT THE TOP, WAS OUT OF HILL & KNOWLTON. I

1 MEAN, I DON'T KNOW WHO THESE TWO INDIVIDUALS ARE.  
2 THEY ARE HAVING SOME SORT OF DISCUSSION HERE. I AM  
3 NOT CLEAR HOW THIS CONNECTS ANYTHING TO C. T. R. , AND  
4 REALLY MY STUDIES HAVE BEEN IN DEALING WITH THE  
5 EFFORTS OF C. T. R. OR T. I. R. C.

6 Q. HERE'S THE SECOND PAGE.

7 "THE C. T. R. AND A. M. A.  
8 PROGRAMS SUFFER FROM ALMOST THE SAME  
9 FAULT. MOST OF THEIR PROJECTS HAVE  
10 ONLY A PERIPHERAL CONNECTION TO  
11 TOBACCO USE.

12 "THE PUBLIC HEALTH SERVICE  
13 HAS CONCLUDED THAT THE EPIDEMIOLOGY  
14 WHICH HAS BEEN DONE IS SUFFICIENT AND  
15 ONLY SEEMS INTERESTED IN FINDING  
16 ADDITIONAL FODDER FOR THEIR PROPAGANDA  
17 MILLS RATHER THAN DOING ADEQUATE  
18 RESEARCH TO PROPERLY DEFINE THE NET  
19 RISK DUE TO SMOKING, IF ANY. "

20 DO YOU KNOW IF PEOPLE WITHIN THE  
21 T. I. R. C. , THOUGHT THAT THE PUBLIC HEALTH SERVICE OF  
22 THE UNITED STATES WAS ENGAGING IN A PROPAGANDA  
23 MILL?

24 A. I WOULDN'T KNOW BECAUSE I WASN'T  
25 THERE.

26 Q. HERE'S PAGE 3:

27 "IN MY OPINION, THE C. T. R.  
28 IS NEITHER ORGANIZED NOR STAFFED TO

1 PROPERLY DO THE JOB TO BE DONE. I  
2 BELIEVE THE JOB CAN BE DONE BY  
3 BRINGING TO BEAR THE SCIENTIFIC  
4 RESOURCES OF THE TOBACCO INDUSTRY ON  
5 THE PROBLEM IN MY OPINION, A  
6 SCIENTIFIC TASK FORCE SHOULD BE  
7 ESTABLISHED IN THE TOBACCO INSTITUTE.  
8 THIS TASK FORCE SHOULD BE COMPOSED OF  
9 THE RESEARCH DIRECTORS OF THE MEMBERS  
10 OF THE INSTITUTE WITH ONE OF THE GROUP  
11 APPOINTED CHAIRMAN. "

12 WAS SUCH A TASK FORCE EVER BUILT  
13 UP?

14 A. I DON'T KNOW.

15 Q. HERE'S PAGE 4.

16 "THE PRIMARY PURPOSE OF THE  
17 TASK FORCE SHOULD BE TO INFLUENCE  
18 RESEARCH EFFORTS IN SUCH A WAY THAT  
19 THE NATURE AND MAGNITUDE OF THE  
20 TOBACCO AND HEALTH PROBLEM (IF THERE  
21 IS ONE), CAN BE PROPERLY DEFINED. NO  
22 PROBLEM CAN BE SOLVED UNTIL IT IS  
23 DEFINED. IF THERE IS NO PROBLEM,  
24 FANTASY AND FANATICISM WILL SLOWLY --"  
25 I CAN'T READ THE NEXT WORD --  
26 SOMETHING.

27 A. THE LAST LINE IS "IT WILL BE  
28 REPLACED BY SOLID FACT. "

1 Q. "AND WILL BE REPLACED BY SOLID  
2 FACTS. "

3 NOW, IN 1967, BASED ON YOUR READING  
4 OF THE MATERIALS, WAS THERE A TOBACCO HEALTH  
5 PROBLEM?

6 MR. CARLTON: OBJECTION, VAGUE,  
7 AMBIGUOUS.

8 THE COURT: OVERRULED.

9 THE WITNESS: CAN YOU BE MORE SPECIFIC?

10 MR. PIUZE: SURE.

11 Q BY MR. PIUZE: THERE'S A REFERENCE  
12 HERE TO THE FACT THAT MAY BE THE TOBACCO AND HEALTH  
13 PROBLEM DOESN'T EVEN EXIST. I AM SIMPLY ASKING  
14 YOU, AFTER MR. MICHAELS CAME OUT TO SEE YOU,  
15 HOWEVER MANY TIMES, AND GAVE YOU ALL THE DOCUMENTS  
16 AND TALKED TO YOU, ARE YOU OF AN UNDERSTANDING THAT  
17 AS OF 1967, IT WAS PRETTY DARN WELL UNDERSTOOD THAT  
18 THERE WAS A TOBACCO AND HEALTH PROBLEM?

19 MR. CARLTON: OBJECTION, VAGUE,  
20 AMBIGUOUS, ARGUMENTATIVE.

21 THE COURT: OVERRULED.

22 MR. PIUZE: I WILL WITHDRAW THE QUESTION.

23 THE COURT: ALL RIGHT, AT THAT, IT'S NOW  
24 3 O'CLOCK, LADIES AND GENTLEMEN, BE BACK AT 3:15.  
25 DON'T DISCUSS THE CASE WITH ANYONE.

26

27 (AT THIS TIME, A RECESS  
28 WAS TAKEN.)

1 (THE FOLLOWING PROCEEDINGS  
2 WERE HELD IN OPEN COURT IN  
3 THE PRESENCE OF THE JURY.)

4  
5 THE COURT: MA'AM, YOU UNDERSTAND YOU ARE  
6 STILL UNDER OATH.

7 THE WITNESS: YES.

8 THE COURT: MR. PIUZE.

9  
10 CROSS-EXAMINATION (RESUMED)

11  
12 BY MR. PIUZE:

13 Q. (READING)  
14 "A FRINGE BENEFIT," PAGE 5,  
15 "MEMO, ALTHOUGH A VERY USEFUL ONE,  
16 WILL BE AN EXTREMELY WELL INFORMED,  
17 COMPLETELY UP-TO-DATE BODY OF THE  
18 KNOWLEDGE WHICH IS READILY AVAILABLE  
19 FOR SCIENTISTS WHO ARE SYMPATHETIC  
20 WITH AND UNDERSTAND THE INDUSTRY. FOR  
21 THESE ADDITIONAL REASONS, THE TASK  
22 FORCE WOULD BE A REAL HELP IN P. R. ,  
23 POLITICAL AND LEGAL MATTERS. "

24 DID YOU TAKE THIS INTO ACCOUNT WHEN  
25 YOU WERE REVIEWING ALL THE DOCUMENTS IN ORDER TO  
26 GIVE YOUR OPINIONS HERE?

27 A. YES, I DID.

28 Q. HERE' S 10, 021.

1                                   \* (EXHIBIT 10, 021,  
2                                   DEMONSTRATIVE, MARKED FOR I. D.)

3  
4                   MR. PIUZE:  THERE IS SENATOR CLEMENTS,  
5 WHO, BY 1967, WAS THE PRESIDENT OF THE TOBACCO  
6 INSTITUTE.

7                                   "THE INDUSTRY'S POSITION IS  
8                   CLEAR, WE DO NOT PRETEND TO KNOW THE  
9                   CAUSE OF SUCH DISEASES AS LUNG CANCER  
10                  AND HEART DISEASE.  NOR DO WE BELIEVE  
11                  THE CRITICS OF SMOKING KNOW THE  
12                  CAUSES. "

13                                  YOU READ THAT, DIDN'T YOU?

14                   A.  TO BE HONEST WITH YOU, I DON'T  
15 RECALL READING THAT PARTICULAR DOCUMENT.  I HAVE  
16 READ A LOT OF DOCUMENTS, BUT I AM HAPPY TO TRY TO  
17 DISCUSS THIS WITH YOU.

18                   Q.  I WANT TO CHALLENGE HIM, GET YOUR  
19 OPINION ON MY CHALLENGE.

20                                  READY?

21                                  IN 1967, ONLY SOMEONE WHO WAS  
22 DEVELOPMENTALLY DISABLED WOULD NOT HAVE UNDERSTOOD  
23 THAT TOBACCO CAUSED LUNG CANCER?

24                   MR. CARLTON:  OBJECTION, RELEVANCE,  
25 BEYOND THE SCOPE.

26                                  THE COURT:  OVERRULED.

27                                  PUT IT IN THE FORM OF A QUESTION.

28                   Q.  BY MR. PIUZE:  WOULDN'T YOU AGREE

1 THAT AS OF 1967, NOT ONLY WAS THE CAUSE OF LUNG  
2 CANCER AND HEART DISEASE UNKNOWN, BUT THAT THE  
3 TOBACCO INDUSTRY RESEARCH COUNCIL WAS OUT THERE  
4 TRYING TO FIND ANSWERS?

5 A. I UNDERSTAND YOUR QUESTION TO BE AS  
6 OF 1967 -- I AM SORRY, I HAVEN'T DONE THIS BEFORE.  
7 IF YOU COULD BREAK IT INTO TWO QUESTIONS, I WOULD  
8 BE HAPPY TO ANSWER IT FOR YOU.

9 SO THE FIRST PART OF YOUR QUESTION  
10 WAS, WAS WHAT?

11 Q. THE FIRST PART IS GONE. I ASKED A  
12 DIFFERENT QUESTION.

13 A. OKAY.

14 Q. AS OF 1967, THE TOBACCO INDUSTRY  
15 DID NOT KNOW THE CAUSE OF DISEASES SUCH AS LUNG  
16 CANCER AND HEART DISEASE AND SO THE TOBACCO  
17 INDUSTRY RESEARCH COUNCIL WAS OUT THERE DOING  
18 RESEARCH TO FIGURE IT OUT; RIGHT?

19 A. YES, THAT IS CORRECT.

20 Q. SO THAT WAS THE FIRST QUESTION.

21 A. OKAY.

22 Q. NEXT QUESTION.

23 WOULD YOU AGREE THEN WITH THE  
24 FOLLOWING: IN 1967, ONLY SOMEONE WHO WAS  
25 DEVELOPMENTALLY DISABLED WOULD NOT HAVE KNOWN THAT,  
26 OF COURSE, TOBACCO CAUSED LUNG CANCER?

27 A. OKAY, YOU KNOW, IT DEPENDS ON WHAT,  
28 HOW WE VIEW THE TERM "CAUSE. "

1 IF WE ARE VIEWING THE TERM "CAUSE"  
2 AS A PUBLIC HEALTH MESSAGE, THEN, YES, SMOKING  
3 CAUSES LUNG CANCER.

4 BUT AS I HAVE TRIED TO EXPLAIN IN  
5 THE, UNDERSTANDING THE PROCESS OF CANCER, IF WE ARE  
6 GOING TO USE CAUSATION IN THE SCIENTIFIC TERM, DOES  
7 SMOKING CAUSE LUNG CANCER, AS YOU CAN SEE, THERE  
8 ARE A LOT OF VARIOUS STEPS IN HERE THAT WE NEED TO  
9 UNDERSTAND TO FIGURE OUT THE MECHANISM BY WHICH  
10 SMOKING IS INVOLVED IN LUNG CANCER.

11 IT'S NOT TO SAY THAT SMOKING IS NOT  
12 DANGEROUS TO YOUR HEALTH. I THINK EVERYONE AGREES  
13 WITH THAT, I, MYSELF.

14 BUT THE FACT IS THAT WHEN WE TURN  
15 TO THE, TURN TOWARDS CAUSATION, WE HAVE THE  
16 SCIENTIFIC VIEW OF CAUSATION AND WE ALSO HAVE TO  
17 DEAL WITH THE PUBLIC HEALTH VIEW OF CAUSATION.

18 Q. SO I GUESS THAT MEANS THAT LAY  
19 PEOPLE, MAYBE WITH A HIGH SCHOOL EDUCATION AND NO  
20 SCIENTIFIC BACKGROUND, SHOULD KNOW THAT TOBACCO  
21 CAUSES LUNG CANCER, BUT SCIENTISTS, EMPLOYED BY THE  
22 TOBACCO INDUSTRY RESEARCH COUNCIL, SHOULDN'T KNOW?

23 MR. CARLTON: OBJECTION, ARGUMENTATIVE.

24 Q BY MR. PIUZE: IS THAT CORRECT?

25 MR. CARLTON: MISSTATES THE TESTIMONY.

26 THE COURT: OVERRULED.

27 THAT MEANS YOU HAVE TO ANSWER THE  
28 QUESTION.

1 THE WITNESS: I AM SORRY, I DIDN' T HEAR  
2 YOU.

3 NO. I MEAN, THE FACT IS THAT  
4 SCIENTISTS IN 1967, IF YOU LOOKED AT THE BIOMEDICAL  
5 SCIENTIST, NOT JUST SCIENTISTS WORKING WITH C. T. R. ,  
6 WHAT YOU WOULD FIND IS THAT THOSE SCIENTISTS WOULD  
7 TELL YOU THAT THERE IS A STRONG ASSOCIATION. THE  
8 PROBLEM WE HAVE IS THAT WHY IS IT. AND THIS IS  
9 WHAT HAS BOTHERED SCIENTISTS, WHY IS IT THAT OF THE  
10 PEOPLE WHO SMOKE, 20 PERCENT DEVELOP LUNG CANCER  
11 AND 80 PERCENT DON' T.

12 IF WE USE THE TERM "CAUSATION" AS  
13 "A" CAUSES "B," THEN IF YOU SMOKE, YOU SHOULD  
14 DEVELOP LUNG CANCER.

15 AND 80 PERCENT OF THE PEOPLE DON' T.  
16 AND THIS IS ONE OF THE THINGS THAT HAS REALLY  
17 BOTHERED SCIENTISTS IN VIEW OF, IN LOOKING AT THIS  
18 PROBLEM

19 Q. HERE WAS MY QUESTION.

20 A. SORRY.

21 Q. DOES YOUR NEXT TO LAST EXPLANATION  
22 MEAN THAT AS OF 1967, A PERSON OFF THE STREET,  
23 LET' S SAY, WITH A HIGH SCHOOL DEGREE, SHOULD HAVE  
24 REALIZED, THAT SMOKING CAUSED LUNG CANCER, BUT THAT  
25 SCIENTISTS EMPLOYED BY THE C. T. I. R. C. , BECAUSE THEY  
26 WERE ENCUMBERED WITH SO MUCH KNOWLEDGE, SHOULD NOT  
27 HAVE KNOWN?

28 A. IN ANSWER TO THE FIRST PART OF YOUR

1 QUESTION, ABOUT THE INDIVIDUALS ON THE STREET, I AM  
2 NOT AN EPIDEMIOLOGIST, I DON'T KNOW WHAT THE PUBLIC  
3 OPINION IS. I DON'T KNOW WHAT THIS POPULATION  
4 WOULD KNOW I KNOW WHAT MY OWN DEALINGS WITH, IN  
5 1967. SO IT'S DIFFICULT FOR ME TO BE ABLE TO  
6 ANSWER YOUR QUESTION.

7 Q. OKAY. CAN'T ANSWER THAT THEN I  
8 WILL GO ON TO THE NEXT.

9 "MEANWHILE, THROUGHOUT THE  
10 WORLD, SCIENTISTS ARE INVESTIGATING  
11 MANY POSSIBLE FACTORS IN THESE  
12 DISEASES IN ADDITION TO SMOKING.

13 "SOME OF THESE INCLUDE  
14 VIRUSES, HORMONE DIFFERENCES, PREVIOUS  
15 LUNG INFECTIONS, OCCUPATIONAL AND AIR  
16 POLLUTANTS, POOR DIET, LACK OF  
17 EXERCISE, AND THE PHYSICAL AND  
18 PSYCHOLOGICAL DIFFERENCES AMONG  
19 PEOPLE.

20 "PROFESSOR BROWNLEE," AND HE  
21 IS A STATISTICIAN WITH THE UNIVERSITY  
22 OF CHICAGO, "ANALYZED AND REVIEWED THE  
23 RESULTS OF MAJOR STATISTICS  
24 ASSOCIATION STUDIES ON WHICH THE  
25 CHARGES AGAINST SMOKING WERE LARGELY  
26 BASED.

27 "HIS CONCLUSION, THIS DATA,  
28 ' DOES NOT ESTABLISH THE CASE FOR

1 CAUSALITY IN LUNG CANCER.  
2 "WHILE THE STATISTICAL  
3 STUDIES APPEAR TO SUPPORT THE SMOKING  
4 THEORY, HE SAID, IT ALSO SUPPORTS  
5 OTHER THEORIES. ONE OF THESE IS THE  
6 THEORY THAT THE KINDS OF PEOPLE WHO  
7 SMOKE MAYBE MORE PRONE TO CERTAIN  
8 DISEASES THAN THE KINDS OF PEOPLE WHO  
9 DO NOT SMOKE. THERE IS GROWING  
10 EVIDENCE TO SUPPORT THIS THEORY AND,  
11 SAYS PROFESSOR BROWNLEE, IT MUST BE  
12 PROVED FALSE BEFORE THE CIGARETTE  
13 THEORY CAN BE JUSTIFIED. "

14 NOW, UNTIL PROVEN GUILTY, THE  
15 CIGARETTE IS INNOCENT; RIGHT?

16 MR. CARLTON: OBJECTION, ARGUMENTATIVE.

17 THE COURT: SUSTAINED.

18 MR. PIUZE: WTHDRAWN.

19 Q BY MR. PIUZE: DID THE TOBACCO  
20 INDUSTRY RESEARCH COUNCIL SPONSOR RESEARCH WITH  
21 MONEY ALONG THESE LINES, RIGHT HERE (INDICATING):

22 "IT MUST BE PROVED FALSE  
23 BEFORE THE CIGARETTE THEORY CAN BE  
24 JUSTIFIED. "

25 A. THE TOBACCO COMPANIES ARE NOT  
26 C. T. R.

27 C. T. R. WAS FUNDING RESEARCH INTO  
28 UNDERSTANDING THE PROBLEM BETWEEN CIGARETTE SMOKING

1 AND HEALTH, AND IN TERMS OF WHAT I HAVE DESCRIBED  
2 HERE IN TERMS OF LUNG CANCER. SO --

3 Q. ISN'T THIS SOMETIMES CALLED THE  
4 GENETIC THEORY?

5 A. I AM SORRY, IT'S REALLY -- CAN I  
6 LOOK AT THE ORIGINAL. IT'S REALLY HARD FOR ME TO  
7 SEE WHAT YOU HAVE UP TO THE SCREEN, IF THAT'S OKAY.

8 Q. YES.

9 I WILL TELL YOU WHAT, BEFORE I GIVE  
10 THIS AWAY -- LET ME FINISH ASKING YOU ABOUT THE  
11 OTHERS AND THEN I WILL GIVE IT TO YOU, OKAY.

12 IS THAT OKAY?

13 A. OKAY. IT'S REALLY TOUGH -- IT'S  
14 TOUGH SEEING IT FROM HERE. BUT OKAY.

15 MR. PIUZE: YOUR HONOR, I DON'T WANT TO  
16 BE OUT OF PLACE HERE. CAN I INVITE THE WITNESS TO  
17 GET CLOSER, IF SHE WANTS.

18 THE COURT: SURE. OR YOU CAN -- YOU  
19 CAN'T BLOW IT UP ANY MORE, CAN YOU, BECAUSE YOU  
20 HAVE REACHED THE LIMIT OF THE ELMD.

21 MR. PIUZE: IT WILL GO OFF THE SCREEN.

22 THE COURT: WOULD YOU LIKE TO GET CLOSER  
23 THERE.

24 THE WITNESS: I WILL DO THE BEST I CAN  
25 FROM HERE.

26 THE COURT: IF YOU NEED TO MOVE CLOSER,  
27 YOU CAN.

28 Q BY MR. PIUZE: (READING)

1 "ANOTHER PHYSICIAN, DR.  
2 HYRAM LANGSTON, CHIEF OF SURGERY AT  
3 THE CHICAGO STATE TUBERCULOSIS  
4 SANITARIUM COMMENTED IN A MEDICAL  
5 JOURNAL EDITORIAL ON THE CAMPAIGN  
6 AGAINST SMOKING. HE SAID, 'TO BOW TO  
7 THE PRESSURE OF HIGHLY ORGANIZED  
8 EMOITIONALISM OR WORSE YET, TO THE  
9 PANIC ENGENDERED BY CANCER PHOBIA AND  
10 AGREE TO CLOSE THE CHAPTER ON THE  
11 ETIOLOGY OF CANCER OF THE LUNG BY  
12 BLAMING CIGARETTES, IS TO DO SO BY  
13 EDICT, AND NOT BY SEARCH. ' "

14 WHAT DOES THAT MEAN?

15 MR. CARLTON: OBJECTION.

16 THE WITNESS: I AM NOT SURE WHAT IT  
17 MEANS.

18 Q BY MR. PIUZE: "SENATOR  
19 MAGNUSON --" DID YOU COME ACROSS HIM IN YOUR  
20 RESEARCH?

21 A. I DON'T RECALL.

22 Q. (READING)

23 "-- SAID HE INTENDS TO  
24 REINTRODUCE A BILL THAT WOULD REQUIRE  
25 LISTING OF TAR AND NICOTINE CONTENT ON  
26 EVERY PACKAGE OF CIGARETTES AND IN  
27 EVERY CIGARETTE ADVERTISEMENT. WE  
28 BELIEVE THIS COULD MISLEAD AND CONFUSE

1 THE PUBLIC INsofar AS IT SUGGESTS THAT  
2 SCIENCE HAS ESTABLISHED A HUMAN HEALTH  
3 SIGNIFICANCE FOR TAR AND NICOTINE OR  
4 FOR PARTICULAR LEVELS OF TAR AND  
5 NICOTINE. AT BEST, SUCH A SUGGESTION  
6 IS A MATTER OF OPINION AND GUESSWORK. "

7 DID YOU TAKE THIS INTO ACCOUNT WHEN  
8 YOU REVIEWED ALL OF THE DOCUMENTS?

9 A. YES, I DID.

10 Q. HERE, DID YOU WANT TO READ -- DO  
11 YOU STILL WANT TO SEE THIS? I HAVE OTHERS. YOU  
12 CAN SEE IT OR I CAN MOVE ON.

13 A. AS WE LOOK AT THE OTHERS, COULD I  
14 LOOK AT THE ORIGINALS AS YOU GO ALONG. IT WILL  
15 HELP ME PUT THINGS INTO CONTEXT.

16 BUT IF YOU ARE DONE WITH THAT ONE,  
17 I DON'T NEED TO SEE IT.

18 Q. HERE'S 10,022. THAT'S MY ONLY ONE,  
19 I AM GOING TO HAVE TO RETRIEVE IT.

20 TAKE A MINUTE AND LOOK AT 10,023  
21 THAT I JUST MARKED ALSO, PLEASE.

22 SO I WILL SHOW YOU 10,023 FIRST,  
23 THIS IS A MINNESOTA DOCUMENT, 10,197, SEE UP THERE,  
24 IT SAYS C. T. R. MEETING?

25 A. YES, I DO.

26 Q. COMMITTEE FOR TOBACCO RESEARCH?

27 A. YES.

28 /// /// ///

1                   \* (EXHIBITS 10,022 AND 10,023,  
2                   DEMONSTRATIVES, MARKED FOR I. D.)

3

4                   Q     BY MR. PIUZE: (READING)  
5                   "C. T. R. IS BEST AND CHEAPEST  
6                   INSURANCE THE TOBACCO INDUSTRY CAN BUY  
7                   AND WITHOUT IT, THE INDUSTRY WOULD  
8                   HAVE TO INVENT C. T. R. OR WOULD BE  
9                   DEAD. "

10                             DID YOU TAKE THAT INTO ACCOUNT WHEN  
11 YOU REVIEWED ALL OF THOSE DOCUMENTS?

12                   A.     YES. I LOOKED AT THIS DOCUMENT AND  
13 IF WE COULD FLIP TO THE FRONT --

14                   Q.     WE CAN.

15                   A.     WE CAN.

16                   Q.     YOU WANT TO GO TO THE FRONT?

17                   A.     PLEASE.

18                             IT'S NOT CLEAR TO ME WHO HAS  
19 WRITTEN THIS DOCUMENT, WHETHER THIS WAS SOMEONE WHO  
20 WAS WRITING THIS DOCUMENT IN A REFERENCE TO A  
21 C. T. R. MEETING. IT'S NOT CLEAR WHERE THIS DOCUMENT  
22 CAME FROM, WHETHER THIS WAS SOMETHING WHICH WAS  
23 INTERNAL TO C. T. R. OR SOMETHING WITHIN THE TOBACCO  
24 COMPANIES OR SOMETHING COMING FROM ELSEWHERE.

25                   Q.     SO BEFORE GETTING READY TO GIVE  
26 YOUR OPINION HERE IN LOS ANGELES, YOU ASKED MR.  
27 MICHAELS ABOUT THIS DOCUMENT; RIGHT?

28                   A.     I LOOKED AT THIS DOCUMENT AND BASED

1 ON EVERYTHING THAT I HAVE REVIEWED ABOUT C. T. R. ,  
2 ITS FUNCTIONS, THE TYPE OF RESEARCH IT FUNDED, THE  
3 RESULTS FROM THE RESEARCH, HAVING REVIEWED WHAT DO  
4 YOU CALL, INTERNAL MEMOS, IN WHICH VARIOUS TOBACCO  
5 COMPANY REPRESENTATIVES WERE VERY NEGATIVE ABOUT  
6 C. T. R. BECAUSE C. T. R. WASN' T DOING WHAT THE TOBACCO  
7 COMPANIES OR INDIVIDUALS WITHIN THE TOBACCO  
8 COMPANIES THOUGHT C. T. R. SHOULD BE DOING AND HAVING  
9 READ THIS MEMO, IS -- FROM ALL OF THAT, I DEVELOPED  
10 OPINIONS.

11 Q. WHAT' S THE ANSWER TO MY QUESTION?  
12 YOU SAW THIS, YOU DIDN' T KNOW EXACTLY WHAT ABOUT  
13 IT, AND SO SEEING THAT MR. MICHAELS PROVIDED IT TO  
14 YOU, HE CAME UP TO VISIT YOU IN LAS VEGAS SIX OR  
15 EIGHT TIMES, YOU ASKED HIM, WHAT ABOUT THIS MEMO;  
16 RIGHT?

17 A. I PROBABLY DID. AND I THINK WHAT  
18 HE TOLD ME WAS THAT WE DIDN' T KNOW WHERE THIS MEMO  
19 WAS COMING FROM

20 Q. "SO AVAILABILITY OF FEDERAL FUNDS  
21 DOWN, SO TOBACCO MONEY AIN' T SO DIRTY ANY MORE. "

22 DO YOU KNOW WHAT THAT REFERS TO?

23 A. NO, I DON' T.

24 I PRESUME IT REFERS TO THE FACT  
25 THAT IF FEDERAL FUNDING INTO RESEARCH WAS AT A  
26 PREMIUM AND FEWER PEOPLE WERE DOING RESEARCH THAT  
27 MAYBE SOME INVESTIGATORS WOULD BE INTERESTED IN  
28 GETTING TOBACCO MONEY.

1                   NOW, IF YOU COULD REMIND ME WHAT  
2 YEAR THIS WAS WRITTEN.

3                   Q.     CAN'T. BUT I BELIEVE -- WELL, I AM  
4 NOT GOING TO TELL YOU WHAT I BELIEVE. I AM NOT  
5 GOING TO REMIND YOU.

6                   A.     THEN I DON'T KNOW WHETHER OR NOT  
7 THAT IS A TRUE STATEMENT.

8                   Q.     WOULDN'T YOU LIKE TO KNOW?

9                   A.     IN HAVING REVIEWED ALL THE  
10 MATERIALS, THIS IS ONE DOCUMENT. I HAVE AN ENTIRE  
11 STUDY OF MATERIAL. AND ESPECIALLY WHEN THE IMPACT  
12 OF THE RESEARCH THAT WAS FUNDED BY C. T. R. , IN TERMS  
13 OF WHAT WE NOW KNOW IN UNDERSTANDING THE  
14 DEVELOPMENT OF CANCER, THE FACT THAT WE HAVE VERY  
15 GOOD CLUES AS TO WHY 20 PERCENT OF THE PEOPLE  
16 DEVELOP LUNG CANCER, THE FACT THAT THIS RESEARCH IS  
17 ALSO LEADING TO IDENTIFYING THE BAD COMPONENTS IN  
18 CIGARETTE SMOKING AND CIGARETTES, THE FACT THAT  
19 THIS RESEARCH IS LEADING TO DIAGNOSTIC TOOLS, THIS  
20 ONE DOCUMENT DID NOT CHANGE MY OPINION.

21                  Q.     SO I AM GOING TO GO ON TO THE NEXT  
22 ONE HERE WHICH WE HAVE SEEN BEFORE. I'D JUST LIKE  
23 TO ASK YOU ONE QUESTION.

24                   "C. T. R. IS BEST AND CHEAPEST  
25 INSURANCE THE TOBACCO INDUSTRY CAN  
26 BUY, AND WITHOUT IT, THE INDUSTRY  
27 WOULD HAVE TO INVENT C. T. R. OR WOULD  
28 BE DEAD. "

1                   AND HERE' S MY QUESTION. THE  
2 INDUSTRY DID INVENT C. T. R. AT THE END OF 1993,  
3 DIDN' T IT?

4                   A. YES, IT DID. AND THE FACT IS THAT,  
5 FROM THIS, THIS IS THE DOCUMENT FROM ONE INDIVIDUAL  
6 AND IT MAY HAVE BEEN THE VIEWPOINT OF INDIVIDUALS  
7 WITHIN THE TOBACCO COMPANIES THAT C. T. R. WOULD  
8 SERVE THIS FUNCTION.

9                   BUT FROM ALL THE STUFF THAT I HAVE  
10 READ AND THE CRITICISMS FROM INDIVIDUALS WITHIN THE  
11 TOBACCO COMPANY ABOUT C. T. R. , REALLY REINFORCED TO  
12 ME THAT C. T. R. WAS FUNCTIONING INDEPENDENTLY OF THE  
13 TOBACCO COMPANIES AND THERE WAS A LOT OF FRICTION  
14 FROM CERTAIN INDIVIDUALS WITHIN THE TOBACCO  
15 COMPANIES AND C. T. R. CONTINUED TO FUNCTION  
16 INDEPENDENT OF THE COMPANIES.

17                  Q. HERE' S 10, 022. THIS WAS ON YOUR  
18 RELIANCE LIST. THIS WAS FROM MINNESOTA.

19                               YOU REVIEWED THIS ONE, DIDN' T YOU?

20                  A. YES, I DID.

21                  Q. I AM GOING TO SHOW YOU PAGE 3.

22                               "OUR 1970 PUBLIC OPINION  
23 SURVEY SHOWED THAT A MAJORITY, 52  
24 PERCENT, BELIEVED THAT CIGARETTES ARE  
25 ONLY ONE OF MANY CAUSES OF SMOKERS  
26 HAVING MORE ILLNESSES. IT ALSO SHOWED  
27 THAT HALF OF THE PEOPLE WHO BELIEVED  
28 THAT SMOKERS HAVE MORE ILLNESSES THAN

1 NON-SMOKERS ACCEPTED THE  
2 CONSTITUTIONAL HYPOTHESIS OF THE  
3 EXPLANATION. "

4 LET' S STOP THERE FOR A SECOND.  
5 MR. BROWNLEE, PROFESSOR BROWNLEE,  
6 THE UNIVERSITY OF CHICAGO STATISTICIAN WHOSE NAME  
7 WAS JUST UP THERE ON THE BOARD, HE WAS THE  
8 PROPONENT OF THE CONSTITUTIONAL HYPOTHESIS; RIGHT?

9 A. HONESTLY, I DON' T KNOW

10 Q. OKAY.

11 "THUS, THERE ARE MILLIONS OF  
12 PEOPLE WHO WOULD BE RECEPTIVE TO A NEW  
13 MESSAGE STATING:

14 "CIGARETTE SMOKING MAY NOT  
15 BE THE HEALTH HAZARD THAT THE  
16 ANTI-SMOKING PEOPLE SAY IT IS BECAUSE  
17 OTHER ALTERNATIVES ARE AT LEAST AS  
18 PROBABLE.

19 "THE ROPER PROPOSAL WOULD BE  
20 A PERSUASIVE, IF NOT STRICTLY  
21 SCIENTIFIC MEDIUM FOR THIS MESSAGE  
22 WHICH WE HAVE DONE LITTLE TO DEVELOP  
23 IN A SYSTEMATIC OR COMPREHENSIVE WAY. "

24 DID YOU TAKE THIS INTO ACCOUNT IN  
25 COMING TO YOUR CONCLUSIONS?

26 A. DID I TAKE INTO ACCOUNT THE  
27 CONSTITUTIONAL HYPOTHESIS?

28 Q. NO, THIS DOCUMENT.

1 A. YES, I DID.

2 Q. DID YOU TAKE THIS INTO ACCOUNT IN  
3 COMING TO YOUR CONCLUSIONS?

4 A. THIS PARTICULAR DOCUMENT IS AN  
5 INTERNAL MEMO. I BELIEVE IT'S AN INTERNAL MEMO  
6 WITHIN ONE OF THE TOBACCO COMPANIES. AND THE FACT  
7 THAT THIS REALLY, TO ME, HAD NO BEARING ON C. T. R.

8 Q. THIS ISN'T ONE OF THE TOBACCO  
9 COMPANIES, KORNEGAY WAS THE PRESIDENT OF THE  
10 TOBACCO INSTITUTE. YOU KNOW THAT FROM YOUR  
11 RESEARCH, DON'T YOU?

12 A. I GUESS I DO.  
13 SO THE TOBACCO INSTITUTE WAS A P. R.  
14 GROUP WHO WAS A REPRESENTATIVE GIVING A SINGLE  
15 VOICE TO THE TOBACCO COMPANIES. SO AS FAR AS I AM  
16 CONCERNED, THIS HAS TO DO WITH THE TOBACCO  
17 COMPANIES AND INDIVIDUALS THEREIN AND REALLY DOES  
18 NOT HAVE AN IMPACT ON MY OPINIONS OF C. T. R.

19 Q. DID YOU ASK MR. MICHAELS WHY HE DID  
20 THIS?

21 A. HE GAVE THIS TO ME BECAUSE IT MIGHT  
22 COME UP IN TERMS OF TESTIMONY.

23 Q. HERE'S 10, 024. I HAVE A BLOWUP OF  
24 THIS WHICH I AM GOING TO MAKE 10, 024-A.

25

26 \* (EXHIBIT 10, 024 AND 10, 024-A,  
27 DEMONSTRATIVES, MARKED FOR I. D.)

28 /// /// ///

1 Q BY MR. PIUZE: WHY DON'T I SHOW  
2 YOU THIS TO START WITH.

3 A. THANK YOU.

4 Q. THIS IS APRIL 21, 1978.

5 "WE HAVE AGAIN ABDICATED THE  
6 SCIENTIFIC RESEARCH DIRECTIONAL  
7 MANAGEMENT OF THE INDUSTRY TO THE  
8 LAWYERS."

9 MR. CARLTON: OBJECTION, FOUNDATION.

10 MR. PIUZE: "VIRTUALLY --"

11 THE COURT: THIS IS ONE OF THE DOCUMENTS  
12 SHE REVIEWED? FOUNDATION.

13 Q BY MR. PIUZE: THIS IS ON YOUR  
14 RELIANCE LIST, ISN'T IT?

15 A. YES, IT IS ON MY RELIANCE LIST.

16 THE COURT: PROCEED, COUNSEL.

17 MR. PIUZE: (READING)

18 "WE HAVE, AGAIN, ABDICATED  
19 THE SCIENTIFIC RESEARCH DIRECTIONAL  
20 MANAGEMENT OF THE INDUSTRY TO THE  
21 LAWYERS, WITH VIRTUALLY NO INVOLVEMENT  
22 ON THE PART OF THE SCIENTIFIC OR  
23 BUSINESS MANAGEMENT SIDE OF THE  
24 BUSINESS.

25 "LORILLARD'S MANAGEMENT IS  
26 OPPOSED TO THE TOTAL --" EXCUSE ME,  
27 "OPPOSED TO THE TOTAL INDUSTRY FUTURE  
28 BEING IN THE HANDS OF COMMITTEE

1 COUNCIL. IT'S REMINISCENT OF THE LATE  
2 '60'S WHEN RAMM'S GROUP RAN A TOBACCO  
3 INSTITUTE C. T. R. AND EVERYTHING ELSE  
4 INVOLVED WITH THE INDUSTRY'S PUBLIC  
5 POSTURE. "

6 FOR OPENERS, DO YOU KNOW WHAT  
7 RAMM'S GROUP WAS?

8 A. I DON'T KNOW WHAT RAMM'S GROUP WAS.  
9 I BELIEVE RAMM WAS A LAWYER, HOWEVER.

10 Q. IS THERE ANY PARTICULAR REASON WHY  
11 YOU DIDN'T ASK FOR MORE PARTICULARS ABOUT WHY RAMM  
12 THE LAWYERS GROUP, RAN C. T. R. IN THE LATE '60'S?

13 A. RAMM'S GROUP DID NOT RUN C. T. R. IN  
14 THE LATE --

15 Q. -- '60'S?

16 A. IN THE LATE '60'S.

17 I MEAN, THERE WAS NO EVIDENCE TO  
18 SUGGEST THAT RAMM WAS DOING -- RAMM WAS NOT  
19 INVOLVED IN DETERMINING WHERE THE SCIENTIFIC  
20 FOCUSES WOULD BE. HE WAS NOT INVOLVED IN WHAT WAS  
21 BEING FUNDED. HE WAS NOT INVOLVED IN, YOU KNOW, HE  
22 WAS SOMEBODY WHO, ONE OF THE LAWYERS, I BELIEVE,  
23 ONE OF THE INDIVIDUALS WITHIN C. T. R., BUT HE DID  
24 NOT HAVE ANYTHING TO DO WITH THE RESEARCH PROGRAM

25 Q. WELL, WHEN YOU SAY THERE WAS NO  
26 EVIDENCE, EXCUSE ME, C. T. R.'S LAWYER OR A PERSON  
27 YOU THOUGHT WAS C. T. R.'S LAWYER PUT THIS VERY  
28 DOCUMENT IN YOUR HAND, WOULD YOU CONSIDER THIS

1 A PIECE OF EVIDENCE TO BE INVESTIGATED?

2 A. AND I DID.

3 Q. OKAY. SO LET'S HEAR ABOUT MR. RAMM  
4 THEN.

5 A. MY INVESTIGATIONS DIDN'T HAVE TO DO  
6 WITH TRYING TO FIND OUT EXACTLY WHO MR. RAMMS WAS.  
7 I FOCUSED ON WHETHER OR NOT SOMEBODY LIKE MR. RAMMS  
8 HAD AN INFLUENCE ON THE RESEARCH PROGRAM

9 AND THE WAY THAT I LOOKED TO SEE  
10 WHAT WAS GOING ON IN THE RESEARCH PROGRAM WAS GOING  
11 THROUGH THE S. A. B. MINUTES, LOOKING AT THE GRANTS  
12 WHICH HAD BEEN FUNDED, THE GRANTS THAT HAD NOT BEEN  
13 FUNDED, GOING BACK AND SEEING WHETHER OR NOT THINGS  
14 CORRELATED BETWEEN THE S. A. B. MINUTES AND THEN  
15 REALLY LOOKING AT THE OVERALL PRODUCTIVITY OF THIS  
16 RESEARCH PROGRAM

17 Q. WOULDN'T YOU THINK THAT IF  
18 LORILLARD, ONE OF THE TOBACCO COMPANIES, ACCUSATION  
19 WAS TRUE, THAT LAWYERS WERE IN CHARGE, NOT  
20 SCIENTISTS, THAT THAT WOULD BE NOTEWORTHY?

21 A. LET ME PUT IT THIS WAY. THAT I  
22 REALLY FELT THAT MUCH OF WHAT WAS GOING ON WITHIN  
23 THE TOBACCO COMPANIES, AND THEIR POSITIONS, WAS NOT  
24 NECESSARILY GOING TO BE IN THE BEST INTERESTS OF  
25 C. T. R. FROM THE VARIOUS OTHER INTERNAL MEMOS I HAVE  
26 READ, AND REALLY EVERYBODY HAS THEIR OWN OPINIONS,  
27 PEOPLE WITHIN THE TOBACCO COMPANIES, THERE'S LOTS  
28 OF MEMOS COMPLAINING ABOUT HOW C. T. R. WAS BEING

1 RUN, THAT THE BOTTOM LINE IS THAT C. T. R. WAS  
2 INDEPENDENT OF THE TOBACCO COMPANIES, AND SO IF  
3 LORILLARD IS MAKING SOME SORT OF COMPLAINT IN HERE,  
4 IT DID NOT IMPACT ON THE FUNCTIONING OF C. T. R.

5 Q. YOU SEE, THIS PARTICULAR COMPLAINT  
6 ISN'T THAT LORILLARD DISAGREES WITH THE SCIENCE,  
7 THIS PARTICULAR COMPLAINT IS THAT LORILLARD SAYS  
8 THE SCIENTISTS AREN'T IN CHARGE OF THE SCIENCE, THE  
9 LAWYERS ARE IN CHARGE OF THE SCIENCE.

10 YOU RECOGNIZE THAT IN THIS  
11 DOCUMENT, DON'T YOU?

12 A. RIGHT. AND THEY WEREN'T. WHOEVER  
13 WROTE THIS WAS WRONG.

14 Q. OKAY.

15 A. THEY WERE WRONG.

16 Q. OKAY.

17 SO YOU HAVE TOLD US WHAT RAMMS  
18 GROUP IS. TELL US WHAT THE COMMITTEE OF COUNCIL  
19 WAS, PLEASE.

20 A. THE COMMITTEE OF COUNSEL, I DON'T  
21 KNOW WHAT THE COMMITTEE OF COUNCIL WAS. IT WAS NOT  
22 PART OF C. T. R.

23 Q. YOU DON'T KNOW WHAT IT WAS?

24 A. I BELIEVE IT WAS A GROUP OF  
25 LAWYERS, BUT IT WAS NOT PART OF C. T. R. AND REALLY  
26 IS NOT HIGH ON MY RADAR SCREEN.

27 Q. OKAY.

28 HERE'S THE SECOND PAGE OF THIS

1 10, 024:

2 "THE COMMITTEE WILL NOT  
3 REPORT TO THE COMMITTEE OF COUNCIL BUT  
4 TO OUR OWN CORPORATE C. E. O. ' S. "

5 DO YOU KNOW WHAT THAT MEANS?

6 A. NO, I DON' T.

7 Q. DID YOU ASK?

8 A. I DIDN' T THINK IT WAS IMPORTANT TO  
9 MY UNDERSTANDING OF C. T. R.

10 Q. LET' S JUST PICK THIS UP HERE AND  
11 SKIP PART OF IT.

12 "WE REQUIRE A MEETING OF THE  
13 COMMITTEE. "

14 NOW, LOOK AT THIS, SCIENTIFIC  
15 RESEARCH LIAISON COMMITTEE.

16 DO YOU KNOW WHAT THAT IS?

17 A. NO, I DON' T.

18 Q. DID YOU ASK?

19 A. NO, I DIDN' T.

20 Q. (READING)

21 "WE, LORILLARD, REQUIRE A  
22 MEETING OF THE COMMITTEE ON A  
23 RECONSTITUTION LEADING TO REGULAR  
24 MEETINGS TO GIVE POLICY DIRECTION TO  
25 THE INDUSTRY RESEARCH C. T. R. ,  
26 HARVARD, POSSIBLE NEW PROPOSAL, ET  
27 AL. "

28 DID YOU ASK WHAT ANY OF THAT MEANT?

1           A.     I BELIEVE THAT THIS IS IN CONTEXT  
2 THAT THIS PARTICULAR DOCUMENT, WHICH WE HAVE NO  
3 INDICATION OF WHERE IT IS FROM, WHO HAS WRITTEN IT,  
4 THAT THIS WAS AN INTERNAL DOCUMENT. AND IT WAS  
5 INTRODUCED, I BELIEVE, TO ME, AS AN INTERNAL  
6 DOCUMENT THAT -- THIS DOCUMENT WAS WHAT WAS GOING  
7 ON WITHIN THE TOBACCO COMPANIES. AND FROM THE  
8 OTHER DOCUMENTS THAT I HAVE REVIEWED, AS I HAVE  
9 SAID BEFORE, THERE ARE A LOT OF DOCUMENTS  
10 INDICATING DISCOURSE AMONG SCIENTISTS WITHIN THE  
11 TOBACCO COMPANIES ABOUT THE WAY C. T. R. WAS RUNNING.

12                         AND I BELIEVE THAT THIS IS JUST,  
13 AGAIN, THE TOBACCO COMPANIES' FEELING THAT THEY DID  
14 NOT HAVE ENOUGH CONTROL OVER C. T. R. AND THAT C. T. R.  
15 WAS FUNCTIONING AS AN INDEPENDENT ENTITY.

16           Q.     DOESN' T THIS SAY THE EXACT 100  
17 PERCENT, 180 DEGREE OPPOSITE OF WHAT YOU JUST TOLD  
18 THE JURY?

19           A.     NO.

20           Q.     DOESN' T THIS SAY, FROM LORILLARD,  
21 ONE OF THE TOBACCO COMPANIES, THAT WE WANT TO GET  
22 SCIENCE OUT OF THE HANDS OF THE LAWYERS AND GIVE IT  
23 TO THE C. T. R. AND HARVARD?

24           A.     I DON' T THINK SO. THAT' S POLICY  
25 DIRECTION.

26           Q.     OKAY.

27                         GET IT OUT OF THE HANDS OF THE  
28 LAWYERS AND GIVE IT TO THE C. T. R. , ISN' T THAT WHAT

1 THIS DOCUMENT IS SAYING, AND TO HARVARD?

2 A. I DON'T THINK SO.

3 Q. "THE COMMITTEE WILL NOT RESPOND TO  
4 THE COMMITTEE OF COUNCIL BUT TO OUR OWN CORPORATE  
5 C. E. O. 'S. "

6 COMMITTEE OF COUNSEL, WAS THAT AN  
7 ORGANIZATION OF LAWYERS THAT WERE ACTUALLY RUNNING  
8 THE TOBACCO INDUSTRY?

9 MR. CARLTON: OBJECTION, NO FOUNDATION,  
10 ASKED AND ANSWERED.

11 THE COURT: IF YOU KNOW

12 THE WITNESS: I AM SORRY, I HAVE LOST THE  
13 LAST HALF OF YOUR QUESTION.

14 YOU SAID WAS THAT A COMMITTEE OF --

15 Q BY MR. PIUZE: WASN'T THE  
16 COMMITTEE OF COUNSEL AN ORGANIZATION THAT ACTUALLY  
17 WAS MADE UP OF LAWYERS FROM EACH OF THE COMPANIES  
18 THAT ACTUALLY RAN THE TOBACCO INDUSTRY?

19 A. THAT RAN THE TOBACCO INDUSTRY?

20 Q. YES.

21 A. I DON'T KNOW

22 Q. HERE'S 10,024.

23 AND THIS IS FROM JUNE 24, 1974.

24 THE CLERK: DID YOU SAY 23 OR 25.

25 MR. PIUZE: YOU ARE RIGHT, I SAID 25.

26 THANK YOU.

27 /// /// ///

28 /// /// ///

1                                   \* (EXHIBIT 10, 025,  
2                                   DEMONSTRATIVE, MARKED FOR I. D.)

3

4                   Q     BY MR. PIUZE: DO YOU KNOW WHO  
5 THESE TWO MEN ARE AT LORILLARD?

6                   A.    I BELIEVE THAT MR. SPEARS OR  
7 DR. SPEARS WAS A SCIENTIST THERE AND I BELIEVE  
8 JUDGE WAS AN UPPER ADMINISTRATOR, C. E. O. TYPE.

9                   Q.    AT LORILLARD; RIGHT?

10                  A.    YES.

11                  Q.    LET' S JUST JUMP BACK TO 10, 023.  
12 YOU DIDN' T KNOW WHO SOME OF THOSE PEOPLE WERE. DO  
13 YOU SEE MR. JUDGE' S NAME UP THERE?

14                  A.    YES, I DO.

15                  Q.    YOU KNOW WHAT, HERE' S WHAT I' D  
16 ACTUALLY LIKE TO DO, SINCE I HAVE MY EYE ON THE  
17 CLOCK, I' D LIKE TO SHOW YOU INSTEAD, FOR TODAY,  
18 10, 026 INSTEAD.

19                               DO YOU REMEMBER DISCUSSING MR.  
20 SOMMERS?

21                  A.    YES, I DO. YES, I DO.

22                  Q.    IT' S DR. SOMMERS, ISN' T IT?

23                  A.    YES, IT IS.

24                  Q.    TELL THE JURY, REMIND THE JURY, WHO  
25 WAS DR. SOMMERS?

26                  A.    DR. SOMMERS ORIGINALLY WAS A MEMBER  
27 OF THE S. A. B. , THE SCIENTIFIC ADVISORY BOARD, AND  
28 THEN SUBSEQUENTLY HE BECAME ONE OF THE DIRECTORS,

1 THE SCIENTIFIC DIRECTOR.

2 Q. THE DIRECTOR OF THE SCIENTIFIC  
3 ADVISORY BOARD OF THE C. T. R. ?

4 A. YES.

5 Q. HERE' S A NOVEMBER 3RD, 1978 LETTER  
6 FROM DR. SOMMERS. DO YOU SEE THAT THAT' S FROM  
7 LENOX HILL HOSPITAL IN NEW YORK CITY?

8 A. YES.

9 Q. DO YOU SEE HIS SIGNATURE DOWN  
10 THERE, HIS NAME?

11 A. CORRECT.

12 Q. DO YOU SEE THE DATE?

13 A. YES.

14 Q. ON NOVEMBER 3RD, 1978, HE WROTE A  
15 LETTER TO THE C. T. R. CAN YOU READ THAT IN YELLOW?

16 A. YES, I CAN. WOULD YOU LIKE ME TO  
17 READ IT?

18 Q. I WOULD.

19 A. (READING)

20 "HENCE, ADVICE OF COUNSEL IS  
21 OUT OF BOUNDS AND SIMPLY ADDS ANOTHER  
22 LEVEL OF AUTHORITY ON RELEVANCE. I  
23 THINK C. T. R. SHOULD BE RENAMED COUNCIL  
24 FOR LEGALLY PERMITTED TOBACCO  
25 RESEARCH, C. L. I. P. T. FOR SHORT. "

26 Q. WHAT DOES THAT MEAN, "LEGALLY  
27 PERMITTED TOBACCO RESEARCH"?

28 A. THIS PARTICULAR MEMO, I THINK THAT

1 THE JURY CAN SEE BY THE TONE OF THE MEMO IS THAT  
2 DR. SOMMERS IS PISSED OFF. WHAT HAS HAPPENED IS  
3 THAT IN --

4 Q. DON'T BE SHY.

5 A. I WON'T.

6 Q. DON'T BE SHY.

7 A. HE IS PISSED.

8 Q. WHY DO YOU THINK THAT IS?

9 A. HE IS PISSED BECAUSE COUNSEL, THAT  
10 HIS LAWYERS ARE TELLING HIM THAT THERE ARE CERTAIN  
11 LINES OF RESEARCH THAT THEY DID NOT WANT C. T. R. TO  
12 FUND AND THAT HAD TO DO -- WELL, AND THE FACT IS  
13 THAT HE'S ANNOYED BY THIS.

14 AND IN FACT, IN THE END, DR. FUXE'S  
15 APPLICATION, AS YOU READ DOWN IN THE NEXT THING IS,  
16 "MY ADVICE AS S. A. B. CHAIRMAN IS THAT ON THE FUXE  
17 APPLICATION, THE COUNCIL IS IN ERROR AND USUAL  
18 CONSIDERATIONS SHOULD GOVERN. "

19 AND IN FACT, THAT IS WHAT HAPPENED.  
20 THE FUXE APPLICATION WAS FUNDED BY C. T. R. C. T. R.  
21 DISREGARDED ADVICE FROM LEGAL COUNSEL. THEY DID  
22 NOT ALLOW THE LAWYERS TO RUN C. T. R. , AND THEY  
23 CONTINUED FUNCTIONING AS AN INDEPENDENT  
24 ORGANIZATION.

25 Q. "I HAVE BEEN THINKING ABOUT THE  
26 RECENT ACTIVITIES OF COUNCIL, C. T. R. , OVER THE PAST  
27 TEN DAYS. "

28 DO YOU KNOW WHAT WAS GOING ON

1 THERE?

2 A. I BELIEVE IT HAD TO DO WITH THE  
3 NEXT SENTENCE, WHICH IS THE ANTI-TRUST LAW, WHICH  
4 WAS THE ISSUE ABOUT WHETHER OR NOT TO FUND THE FUXE  
5 APPLICATION WHICH HAD TO DO WITH NICOTINE RESEARCH.

6 Q. "COUNCIL FOR LEGALLY PERMITTED  
7 TOBACCO RESEARCH," DO YOU THINK "LEGALLY PERMITTED"  
8 SHOULD BE IN THERE?

9 A. DR. SOMDR, AT THIS POINT, IS BEING  
10 SARCASTIC BECAUSE HE'S REALLY ANNOYED WITH THE  
11 INTERFERENCE BY LEGAL COUNSEL.

12 THE BOTTOM LINE IS THAT HE'S  
13 VENTING HOW HE FEELS. AND THE FACT THAT THE  
14 APPLICATION, THE FUXE APPLICATION, WHICH IS WHAT IS  
15 CENTRAL TO THIS ISSUE HERE, WAS, INDEED, FUNDED,  
16 THE IGNORED THE LAWYERS, AND THEY CONTINUED TO  
17 FUNCTION AS AN INDEPENDENT ENTITY.

18 Q. HERE'S MY LAST, VERY BRIEF LINE FOR  
19 THE DAY, BECAUSE I AM LOOKING ABOVE YOUR HEAD  
20 THERE.

21 DR. SOMMERS' TENURE WAS FROM WHEN  
22 TO WHEN?

23 A. DR. SOMMERS WAS THERE FROM I  
24 BELIEVE, '72 AND I CAN'T RECALL NOW WHAT THE ENDING  
25 DATE WAS.

26 Q. YOU HAVE THE DOCUMENTS TO FIND OUT  
27 BY TOMORROW MORNING, DON'T YOU?

28 A. I WILL NOT BE HERE TOMORROW

1 MORNING.

2 Q. OKAY.

3 A. BUT, IN FACT, HE DID NOT, HE  
4 CONTINUED ON AS SCIENTIFIC DIRECTOR, EVEN AFTER  
5 THIS ISSUE WITH THE LAWYERS.

6 Q. OKAY.

7 THE COURT: THANK YOU, COUNSEL.

8 IT' S NOW 4 O' CLOCK, LADIES AND  
9 GENTLEMEN. WE WILL SEE YOU TOMORROW MORNING AT  
10 8:45, THANK YOU VERY MUCH.

11

12 (AT THIS TIME, THE PROCEEDINGS  
13 IN THE ABOVE-ENTITLED MATTER  
14 CONTINUED TO WEDNESDAY, MAY 9TH,  
15 2001 AT 8:45 A.M.)

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