

DR. HUBBARD INTERVIEWS ROBERT Z. PAGE IN THE 1970s.

The Robert Page Interview is given courtesy of Shawn Montgomery www.zerozerotwo.org who transcribed it from the original recordings.

1. HUBBARD: May I speak with a Mr. Robert Z. Page, and is there a Mr. Christopher Bird there please?

Page: Mr. Bird is here and I'll put him on this phone and I'll go upstairs and take another one.

2. HUBBARD: Oh, you're Mr. Page?

PAGE: Yes.

3. BIRD: Hello John. Well I've learned a lot already. Well, this guy really knows his onions, and he'll get on the phone here in a few minutes and say a few words to you about what he has been telling me, but one of the KEYS to the whole (Rife microscope) thing is the method of illumination. And he (Page) has patented the same (as Rife's), or a very analogous method, and for the last ten years he has had absolutely no success in marketing it because of pressures all over the place.

4. HUBBARD: Well, that's strange. That's very odd.

PAGE: (Page discussing his own microscope illumination device) Well anybody that wanted to could make that thing and put it up for sale. If you were dependent on any of the existing companies that produce for anything that you need: any of the companies like Bausch and Lomb, or American Optical, or Zeiss, or any company that exists because they make and sell microscopes, then you are out of luck. If you have an optical company that can give you what you need without doing that, then you are ok. If you have a company that makes lenses strictly for cameras and not for microscopes then they would probably make it for you. One thing this won't do is show you very much in a section of tissue, well, it does to some extent. It works beautifully well with particulate matter. What I have done with it is to add some features in addition to the monochromatic oblique illumination that Roy Rife used, to make it a more useful thing. You can widen out your band of light, take something beyond monochromatic, and it looks green, or it looks red, or it looks violet, but it's a much wider beam and it doesn't give you this resonant frequency which is akin to spectroscopy on a microscopic scale. Incidentally, in a broad band of light your spectroscope doesn't work, of course. So you can then, with this gadget, illuminate, now that involves oblique illumination, of course, if you have a scope that will take a dark-field stop, and then you can use this with it. I mean if it's got a good condenser clip. And most of the condensers that you will see will suck, so, with a dark-field stop you can get this monochromatic oblique illumination or you can get apparent monochromatic. Then, you can also use a contrasting color for transmitted illumination, so say your contrast is red and green stoplights, and if you are working with it for very long that's too much contrast. Now this is excellent for searches for instance, like you'd be running in a parasitology lab, or if you are looking at stool specimens. It's excellent for that sort of thing. It's fairly good on some types of sectioned tissue, but on some types it's not very good. There you'd have to shift back to your monochromatic again. I don't know whether you remember the pictures in Life magazine back in '51, late '51. Roman Vishniac? He had a color system for microscopy and he refused to tell anybody what it was all about because he was a professional photographer and he was afraid somebody would find out how he took these pictures. If they could take pictures he wouldn't be

able to sell his. But it was a several page color spread. He used light from oblique angles to color his specimens with phase contrast.

Lengthy discussion of different microscopes that have been patented but are not produced because they threaten the market.

PAGE: I don't see any difference in the illumination ability at 100 or 2,000. It's there. If you had a microscope like Rife made you could go considerably beyond that if you could eliminate both chromatic and spherical aberration, and that's what he did. In theory then, you can keep on going up.

5. BIRD: You made the point (in an earlier conversation) that after Rife solved the illumination problem, he then solved the problems of spherical and chromatic aberration, would you tell us a little more about that?

PAGE: Well yes, to get away from spherical aberration, which is the worst offender there, ordinarily, you go to parabolics. Again, no more circle of elimination.

6. HUBBARD: He built parabolic lenses?

Page: Yes sir, he learned to grind them himself.

7. HUBBARD: Oh. Who did this?

PAGE: Rife.

8. HUBBARD: He built parabolic lenses!!?

PAGE: Well, you know, an awful lot of astronomers grind their own.

9. HUBBARD: Yes, I know, but, did Rife say that there were parabolic lenses in his illuminator?

PAGE: Well, he told me that he had learned how to grind parabolic lenses and if that's the way he solved his, no not in his illuminator, in his microscope.

10. HUBBARD: In his microscope.

PAGE: Not in the illuminator, no. That's a fairly simple, straightforward thing.

11. BIRD: (To Hubbard) And Mr. Page told me that Rife went to Holland and he learned how to grind parabolic lenses in Holland.

PAGE: It may have been Germany.

12. BIRD: Germany then. OK, so he got rid of that aberration that way and the other aberration he got rid of with mirrors?

PAGE: First he went to quartz like everybody does, and he told me he wasn't satisfied with quartz. And so he solved his problem. And I said, "You used mirrors, huh?" And he gave me a funny look, and then he laughed

13. HUBBARD: (Interrupting) well now, when did you first meet Rife?

PAGE: Oh I don't remember. It was years ago in my childhood. I don't even remember.

14. BIRD: Well now John, getting that part of the story, I already have an hour of it on tape, so why don't we just stick to the technology and ask him the questions while he is on the phone, and I'll send you the other part of it with everything that Mr. Page can recollect.

15. HUBBARD: Well, I'm particularly interested in how Mr. Page got introduced and what did he do?

PAGE: My parents knew him for a number of years. For a while I lived across the street from his laboratory.

16. HUBBARD: Oh, I see.

PAGE: This goes back years and years and years, and I was a child.

17. HUBBARD: All right, now, did you personally look through his number three, his big universal microscope?

PAGE: No, I never looked through it.

18. HUBBARD: Did you personally look through his number four microscope?

PAGE: No.

19. HUBBARD: Did you yourself see any pictures, which Rife had made with the big microscope?

PAGE: Yes. A bacillus coli is a huge thing. It was "B. coli" back then, and it was a huge sausage, and inside it were all kinds of structures, and he was telling me what he thought they did. But they were not in any books any place; they were never in anybody else's illustrations. Nobody else had seen them.

20. HUBBARD: Now, did he tell you when he made these pictures of the typhoid bacillus? What year did he make the picture in?

PAGE: Well, the particular that I was talking about was not a typhoid it was a bacillus coli, most of us carry that around (in our intestines). He had a number of pictures. I think he had one of the typhoid bacillus, but it wasn't as interesting, and it was a little bit smaller, as I remember. He had a bunch of these hung on the walls in the hallways in his laboratory: pictures of a number of things.

21. HUBBARD: All right, now then, have you personally looked at the report in the Smithsonian Institute where Seidel shows a picture that was reported as a typhoid bacillus?

PAGE: No.

22. Hubbard: You haven't.

BIRD: I can make that picture available to him and I shall do it before I leave for the mid-west.

23. HUBBARD: All right. I would like for you to tell me then later, Mr. Page, if this is what you think is the same image of what you thought was the bacillus coli?

PAGE: Well, he probably had some, he had photographed a great many things, and this particular one though he said this was the B coli. He was telling me what the differences in some of these new structures that he had seen were, based on their chemistry.

24. HUBBARD: Let me ask you this, had there been a fire? Had there been a fire in his laboratory in the time that you were around?

PAGE: Fire? Fire? It doesn't ring a bell.

25. BIRD: What the Professor is asking, Mr. Page, is that there are no pictures left and he made movies as well, and all of the pictures, and all of the movies have gone, and disappeared, or been stolen, or been burned, or been something or other.

PAGE: Well I don't think they were lost in a fire. Now there may have been a fire because somebody wanted a Fire Sale - that sort of a thing. This I don't know. Or possibly to destroy something. His laboratory was not burned down. It was used after. In fact he sold it, and the person that was using it was a chemist who worked for the outfit that makes Southern Comfort whiskey. The guy was working on essences. And that's all he worked on - the man that was in the laboratory that was bought for him from Roy Rife.

26. HUBBARD Well now, let's go back a minute. You say you were a child across the street from Rife's?

PAGE: No, I wasn't a child living across the street from him. I knew him when I was a child, but I lived across the street from his laboratory, not across from his house. His house was on another street, sort of diagonally through a couple of vacant lots. They are not vacant lots now of course, but that was after World War Two. My parents bought part of the Bridges estate when it was put on the market. I helped my folks build a home there after World War Two. My wife and I helped them weekends and evenings while I was going back to school and as soon as the second bedroom was finished we moved into the house. That's when I was living across the street from him for the second time.

27. HUBBARD: What I am trying to get at Mr. Page, is as much as possible of the history of the photographs that were made with this microscope. This is crucially important. So as far as you know then, there was no fire destruction in Rife's laboratory up until the time you met him?

PAGE: Well, I met him when I was a child, and he had a lot of these pictures then.

28. HUBBARD: A lot of them. Do you mean ten? Or twenty?

PAGE: Oh gee, I don't know. He had, well, just in his hallway there was probably, oh, a dozen and a half, something like that.

29. BIRD: And these were blown up just to put on the walls of the hallways.

PAGE: Yeah. But there were other pictures too, in some of the other rooms. I remember one room in which he had one pretty good-sized area, but there was something in there: racks for storage batteries. But that has nothing to do with the microscope.

30. HUBBARD: Let me ask, when did you leave the neighborhood where Rife's Laboratory and his home were?

PAGE: Oh, let's see, '47. Then, I never really came back to live there anymore, but I guess because my folks lived across the street from him there, it was their home, where I lived for a short period of time, I'd stop to see him every time I'd come into town.

31. HUBBARD: When is the last time you saw him then?

PAGE: I guess the last time I saw him was when I was back as a hospital patient. I'd come back from Korea and I was a hospital patient in San Diego. That was pretty much '52.

32. HUBBARD: Had Mr. Crane joined Rife at that time?

PAGE: I don't associate that name with anything specific. But the last time I saw Roy Rife was at his home on Zola Street. He opened his garage and showed me some of his units that had nothing to do with microscopy, that he was selling for junk parts for radio hams to come pick up the parts and use them. He had the ghosts of three of them left at the time that I saw them. That's the last recollection I have of seeing Rife.

33. BIRD: Those were the ray devices.

PAGE: Yeah. They looked like small diathermy cabinets on wheels and

34. HUBBARD: He was taking them apart and selling them?

PAGE: Well he preferred to sell whole units. If somebody only wanted part of one, why, then he would cannibalize one that had already been cannibalized to some extent. He was just trying to get the money off them. His eyes were shot; he couldn't see much of anything anymore. He had already gotten rid of his microscope, and all the equipment and everything else, and he sold his laboratory, and he was running out of money to live, and he could hardly see what he was doing.

35. HUBBARD: He could hardly see. And this was in 1952?

BIRD: You remember Professor that he was going to (Dr.) Heisner there to try to get his eyesight back.

36. HUBBARD: Yes. So, the time that you last saw him Mr. Page he was really not alert and able to work was he?

PAGE: He couldn't see. His eyes looked red and they were a little runny. He told me how much trouble he was having with them. The light outside bothered him. When we went out the door and down the steps he had a little problem with the steps, and we got out to the garage and he showed me the units and I said I wanted to buy one.

37. BIRD: Mr. Page told me, Professor Hubbard, and this comes directly from Ben Cullen, that he would work for hours and hours without moving, getting these things to illuminate.

PAGE: He used the big microscope on a hydraulic device. It was a barber chair without the chair on it.

38. HUBBARD: Oh! Which scope?

PAGE: That was the big one. The eyepieces came straight out from the top of the thing and then he had one above that for photography. The only way he could rest his back or his neck was to jack this thing up or down a little bit. He would sit there for hours and hours at a time taking one picture. That's why I was kidding him one time: I said, why didn't you drive those things, you know? And he thought for a while and he said, "I don't know, I never thought about it."

39. HUBBARD: Having a motor drive on his focusing unit?

PAGE: Right. And that was right after he told me that he was the brightest man in his whole generation and probably two or three generations each side of it.

40. HUBBARD: He said what now?

PAGE: It was just less than a minute after that, I think, that he had told me that he was probably the brightest man the most brilliant man, in his generation, and perhaps a generation or two each side of his. (Laughs) I said, so why didn't you ever think of driving those things mechanically?

41. BIRD: It was not just driving the microscope but also the prisms.

PAGE: Yeah, that it was, the prisms to illuminate it because he would spend hours, he'd turn one prism just slightly, revolve it just slightly, and then he would slowly go through 360 degrees with the second one. Then, he'd move the first one again, very, very slowly. Anytime he would come to anything that would light up suddenly under the microscope he would stop.

42. BIRD: When he rotated the prisms, he'd get a certain kind of monochromatic light, depending on where the prism was, and then he could light up not only a specimen, but part of a specimen, to reveal something in it that no one had ever seen.

43. HUBBARD: Well Chris, this is what is most important for me to find out from Mr. Page. On the big universal microscope there are two sets of facing prisms that were rotatable through an axial cable to the right

PAGE: Well I thought each of those; one set was immediately above another?

44. HUBBARD: One set was immediately above another.

PAGE: I didn't know he had sets of prisms, I thought he only had two prisms.

45. BIRD: You may be talking about another microscope?

PAGE: Well this cable device and all that you are talking about, yeah, he had the simple knobs out in front, that took him hours and hours to rotate these things.

46. HUBBARD: This is the universal microscope that I am talking about. Was this the one he was looking through?

PAGE: A very large barrel? Stainless steel? A beautiful looking thing.

47. BIRD: I think it's the number five.

HUBBARD: Well, number five was in England.

BIRD: No, it didn't go to England 'till 1940.

49. HUBBARD: What year are you talking about now Mr. Page?

PAGE: Oh gee, um, well, I could have been looking at the thing before the war and talking about it afterwards.

50. HUBBARD: Well if he was looking through the microscope before the war, it could have been the Universal. If it was after the war it could have been the number four, or number five before the number five went to England. But I think that number five went to England in 1940, so that would mean that it would either be number three: the Universal or number four.

PAGE: Well the last one that he had, that I saw him with, was a very large barreled, stainless-steel housing and that's what made me think of mirrors because it looked like a short section of a telescope barrel.

51. HUBBARD: Did he have numerous attachments on the side?

PAGE: No this one was fairly simple.

52. HUBBARD: OK, now then, let's go back then. So now we are dealing with number four then. Now the number four only has but one set of prisms on it, between the illuminator and the sub-stage condenser there is one set of prisms. The prisms rotate in opposite directions to one another.

PAGE: Yep.

53. HUBBARD: And that set of prisms is only about as thick as your finger. Do you remember? There are some numbers on the sides.

PAGE: A finger and a half.

54. HUBBARD: A finger and a half. OK. Now, there was some numbers on the side of that prism. But you say he would rotate this prism very slowly?

PAGE: Yes, by turning the knobs out front. It was way back in the back of this thing, he couldn't reach around to it.

55. BIRD: He rotated the prisms John, in order to get the monochromatic illumination, to shift through the spectrum and select what he wanted, to illuminate the specimen whatever it was.

PAGE: To slowly shift all the way through the spectrum you'd turn one prism just a touch, and then you'd go through the other one, slowly, 360 degrees. You'd turn the first prism a touch more, then go through the other one 360 degrees. And do it again and again and again. It would take him hours.

56. HUBBARD: That would be very time consuming. If he was using number four, he was using the rotation of the prisms below the sub-stage, and then he may have been rotating the stage itself.

PAGE: He had other controls for the stage. He could move his stage, yes, but that wasn't directly related to this. But what he was doing with those prisms was just going through the spectrum.

57. BIRD: That was the key to it.

PAGE: It was just like spectroscopy on a microscopic scale. You use oblique illumination, and you shift through the spectrum. And that's all he was doing. And that's why he could hypothesize as to what the particular structures that he saw were doing based on their chemistry.

58. HUBBARD: How did he relate chemistry of the organisms to the spectrum?

PAGE: Spectroscopy.

59. HUBBARD: But you can relate certain elements, and you can, with infra-red microscopy, relate molecular structure but with visible light, you cannot make deductions about chemical structure with except for elemental analysis, with visible light.

PAGE: Well, I don't know, but that's what he was doing. I've had no experience in spectroscopy, but that's what he was doing completely. Now, he had put an awful lot of organisms with an awful lot of internal structures under his microscope, and he had a pretty good idea what some of those structures were doing. And they lit up in a particular part of the spectrum, and something else lit up in that same particular part. He was basing it on that.

60. HUBBARD: Do you know whether he ever mentioned ultra-violet emission from his tungsten illuminator?

PAGE: Well, he had gotten away from tungsten.

61. HUBBARD: What was he using as an illuminator when you knew him?

PAGE: He was using carbon arcs. He built his own rods. He was not happy that he had to build his own carbon rods, but he said that he could not find good, clean carbon rods. They were all contaminated and they were all ruining his research. And he gave up on using tungsten long before that.

62. HUBBARD: Now, Chris, I could not find, when I was out there, I did not see any carbon arc machines.

BIRD: That's why you are talking to Mr. Page.

PAGE: He showed me some of his rods and he said he built them. Now is the man a charlatan, was he lying? I don't know. Eventually he completely sold me, because it was not just the microscope, there were an awful lot of things involved. It involved the Rife Ray and some physicians that had worked with him at the time. Two different ones who happened to be very good friends of my parents.

63. BIRD: Who were they?

PAGE: A couple of doctors in San Diego. They are both dead at the present time.

64. BIRD: Was one by the name of Couche?

PAGE: I don't know anybody named Couche out there in San Diego. No. They had both been contributing some of their own time at the Paradise Valley Sanitarium.

65. BIRD: Oh, that was Dr. Hamer, was he one of them? He was head of the Paradise Valley Sanitarium.

PAGE: That's not one of the ones that I recall. They were not there permanently; they were giving some of their time. Paradise Valley, as I remember, was a free clinic and they had so-called hopeless cases of syphilis and TB and probably some other things. They were sent there to die. If they couldn't afford to die in a regular hospital some place, then they'd go to Paradise Valley. It was sort of a charity clinic more or less at the time. And they were donating some of their time there and they got involved in some tests.

66. HUBBARD: Well, Mr. Page, let me come back now, you never really got to spend much time looking, yourself, through one of Rife's microscopes at any specimens, did you?

PAGE: I told you, I never did. I could understand what he was doing. But never when I was there visiting him, was the scope being used.

67. HUBBARD: It was not being used when you had visited him?

PAGE: No, there were other things going on at the time, but there was never any scope being used. Now, I just handed two gentlemen a copy of a patent but I am not using the illuminator at the present time. But it exists.

68. HUBBARD: How old were you, in your early teens, your middle teens, or your late teens when you first met Rife?

PAGE: Oh, before my teens I am sure. My folks had known him for years.

69. HUBBARD: So you were a child really.

PAGE: Yes sir. He was one of these people you would see off and on and off and on and off and on.

70. BIRD: What's your age now Mr. Page?

PAGE: 58, I'll be 58 in June.

71. BIRD: So in '53 you were a young man graduating from college, or out of the Navy.

PAGE: In '53, well, I got out of the Navy the first time in '43. I had been recalled to active duty. The Navy caught me working for the Army at Fort Benning, Georgia, and the Navy sent me out with the Marines as punishment I guess. (laughs)

72. HUBBARD: Let me ask you some other questions Mr. Page, did Dr. Rife ever look at red blood cells, white blood cells? Did he ever look at any leukocytes? Or did he ever look at any algae when you were there?

PAGE: He had looked at algae, we had discussed it. We discussed insects. We discussed fungi. I can't say that he had looked at red blood cells. He gave me a bunch of slides that had sections, very thin sections of different types of cancer.

73. HUBBARD: How did he make his sections, his thin sections you say?

PAGE: As I remember he had a huge sledge microtome.

74. HUBBARD: A huge sledge microtome?

PAGE: Yeah, the old sliding blade, you know, it looked like a straight razor but it was much larger than that, a great big heavy thing.

75. HUBBARD: Now Chris, this is important. That is one of the most important new observations that we have gotten.

PAGE: I remember it was huge. It was much bigger than the sledge microtome I used in college and I used the biggest one that San Diego State had at the time. It was the department head's pet.

76. HUBBARD: Now the sledge microtome that I am thinking of, that is huge, the blade moves in the horizontal.

PAGE: Yes, dropping downward very slightly as it moves in the horizontal, on a slight angle downward, not perfectly horizontal. Is that the size you are talking about?

77. HUBBARD: Well, pretty much so, was the blade about a foot long?

PAGE: Let me see. I'd say longer than a foot. I'm guessing about 14 or 15 inches.

78. HUBBARD: Was this a microtome that you had ever seen used to cut sections of brain?

PAGE: Well I don't know that it would cut across a complete human brain. No. It wasn't in one slice. If you were cutting from the top down you would have to have a very thin section that you would have cut off the top because the thing, on a slight angle, would have had to have been longer than I believe it was. If you just took a block of the brain tissue, then yes, this would probably do a real good job. But I don't know what he used for embedding media.

79. HUBBARD: You don't know what he used for embedding media?

PAGE: No sir, I don't know. He may have used paraffin with rubber in it, Latex?

80. HUBBARD: Let me ask you, did you ever see him using a microtome, actually cutting with it?

PAGE: No sir, I have never personally seen him doing any of the things that he claimed to have done. I have only seen him when he was relaxed, or when he was un-relaxed but unhappy about something. I'd never seen him at work in his laboratory. I have visited his laboratory but he stopped what he was doing to talk with me for a couple of hours at a time. But I wasn't watching him work at the time. I have been in his laboratory several times with a white coat.

81. HUBBARD: Let me ask you, as a child now, do you remember if there was a woman working there in his laboratory who was the daughter of a Dr. Kendall?

PAGE: No sir, just off hand, I don't recall.

82. HUBBARD: Do you recall any women working there in his laboratory?

PAGE: There were people. I have seen a woman in the laboratory. There were three or four other people sometimes when I was there. Now, I guess she must have been working there. But I can't swear to that.

83. HUBBARD: This was, as a child, that you saw these people working in his laboratory, didn't you?

PAGE: Yes, pre-teenage, and early teenage, and I don't recall seeing people in there in my late teens. I just don't recall. I could have.

84. HUBBARD: Were there any people working around him when you were in your late twenties?

PAGE: My late twenties let's see there was somebody around there, yes sir. A man, slightly built, rather thin, taller than Rife

85. HUBBARD: Did you know a Dr. Kendall?

PAGE: No sir.

86. HUBBARD: Did you ever see any notebooks or records, which Rife was keeping of his observations?

PAGE: Yes sir. One very thick notebook was placed in my hands, and I put it on a little table in his garden.

87. HUBBARD: Chris, can you show Mr. Page your copies of those frequency data sheets that I copied? I wish you could show them and see if he can identify those as being in Rife's handwriting.

BIRD: But I can't do it now because they are at home and I am down with Mr. Page in Springfield.

88. HUBBARD: At a later time than Mr. Page.

89. BIRD: Could you identify Roy Rife's handwriting Mr. Page?

PAGE: I doubt it. It was very small. It was rather precise in that he would make every letter very clearly. Now, it seems to me that there were two or three letters which he made differently from most people, but very quickly you started reading and you can follow it right along and it becomes routine and familiar to you.

90. HUBBARD: But Rife did keep notebooks?

PAGE: Oh yes sir. He kept one very convincing and very complete notebook and he handed it to me and said, "This is my life, my whole life, right here."

91. HUBBARD: Now Chris, if we could get a hold of that notebook.

PAGE: That would be interesting wouldn't it? You see I had it; he was giving it to me.

92. HUBBARD: He gave it to you?

PAGE: Yes sir, he gave it to me. And then I made a mistake. It's one of the mistakes that I regret more than any other I've made, and I've made a lot of them. I'll cut this story very short, do you remember hearing in the 40's, reading in the newspapers, about some flying saucers, or something, coming over from Russia?

93. HUBBARD: Well, I remember flying saucers have been in the newspapers at various times.

PAGE: Well, this started a flying saucer scare, whether they were flying saucers, or low flying rockets, but they were controllable. People from the little villages in some of the free countries in Western Europe, they were a few miles from the Russian border and they would interview everybody in the village, you know, and their stories were all almost alike. There would be just enough differences to account for human fallibility. But these things would come over, they would fly in formation, they would loop and turn and so forth, and then they would go back into Russia. And there'd be stories in the newspapers. And it was a nice pleasant day and I was sitting out there in Rife's garden, and we had some tea that his wife made for us. And he was telling me, "Don't put sugar in it, it's not good for you," and I was putting it in anyway, 'cause I don't think it's very good without it. I don't like it without it. But, this was after he had given me the notebook, and we were sitting there chatting, and he kept asking me about them (UFO's), "What do you think about these?"

"Well, the papers say they are Russian, I don't know."

"Well, what do you think they are doing?"

And I said, "Well, I don't know, maybe they're spying on us."

"Do you think they might have weapons underneath?"

And I said "Well, they might not have the bomb yet, so..."

"Do you think they could probably get it someday?"

"They probably could, if we've got people smart enough to build one, they could build one. But maybe they put something else in it."

And Rife said, "Well, what else would they put in it?"

I said, "Well, they might put the Rife Ray in there."

And he just beamed all over, you know, and he said, "Why, that would be wonderful!"

And I said, "Yeah, you could fly around a city, you know, just circle a city."

And he said "That would be wonderful, we could heal everybody!" He was almost trembling, like a little child, so elated.

And I said, "Yeah Roy, we could tune it to hemoglobin"

And his face kinda went blank, and then he got kinda grey, and he began to tremble and shake, and he ran over, and he was screaming at me, "You can't do things like that to people!! Don't you know that you can't do things like that to people!!" And he picked up a rake and started after me. And I vaulted over the wall. And he told me never to come back and he was shouting at me. Somehow I think he ought to have been swearing at me, but I don't think I had ever heard Roy swear. I went back later but I was never able to get my hands on it, I never saw the notebook after that.

94. HUBBARD: This is very strange. This is the only time you ever saw Rife get so upset, wasn't it?

PAGE: I have seen him become provoked when he would start to talk about these idiots in the medical profession and in the universities because they couldn't repeat the things that he had done, as precisely as he had done them then, they didn't believe that they had really been done (by him). He would become upset with people but this is the only time I had seen him really become emotionally violent.

95. BIRD: How could they possibly repeat the experiments if they didn't have the equipment?

PAGE: Well, they would come in and work with him, he would tell me, and he would tell them to do this and this and this and this, some of them could do it while they were in his lab. Then they would go to someplace else. And he said. "Well, they were always sloppy." He said, "I distill all my water seven times... and I do this and I do that and I do the other thing." And he said "They are sloppy, they don't use pure chemicals." And he would go on and on. But that was the only time I had seen him really angry.

96. HUBBARD: So, after this peculiar reaction to your comments about the use of widespread radiation and you had to climb over the fence to get away from him..?

PAGE: I didn't climb over it, I bolted over it. (Laughs)

97. HUBBARD: And he was after you with the rake. He wasn't just joking, he was really angry?

PAGE: Yes sir. He was not joking. He was smaller than I was, I thought I could have taken the rake away from him, but I figured that it made a lot more sense to just get out of his reach.

98. HUBBARD: But he offered to give you his notebook?

PAGE: He had handed it to me. I set it down on the table.

99. HUBBARD: And when you saw him again, did you ever ask him for that notebook?

PAGE: I asked him for it. I asked him where it was, but he said, "Somebody else has it."

100. HUBBARD: He said somebody else has it?

PAGE: That was it. He didn't apparently want to discuss it very much.

101. HUBBARD: Gee, that's a very peculiar reaction.

PAGE: I could tell some long stories about that notebook and what might have happened to it, and what's happened to me because of it, and a few things that involve the FBI and military intelligence, but I'm not going to go over it.

102. HUBBARD: Well, look Chris; you'll follow up on that angle, won't you?

BIRD: Well, whatever Mister Page wants to say, I'll listen.

103. HUBBARD: Well, look, I'll leave that part of it with you to follow up on getting the notebook. Mister Page, it's extremely important, let me tell you now, everything hinges on these pictures which have been published in the Smithsonian Institute report. There is so little left, if we could get a hold of his original notebooks, if we could get a hold of...

PAGE: I could tell you some of the things that were there in the notebook, now, not the specific details of how he did what, but are you at all conversant on the subject of his charts? They were like the periodic charts for elements, his charts were for microorganisms. Have you heard about them?

104. HUBBARD: No I haven't.

BIRD: Nor have I.

PAGE: He built a chart that was sort of like the periodic chart and there was even seven or nine or thirteen families, it was either nine or seven; I believe all the pathogens fit into one or another of these columns. All the pathogens getting down below worms and so forth, viruses, bacteria of various types, and fungi of various types, and on up through an evolutionary-type ladder. And, he claimed he could breed the mutations or, not mutations that he could breed changes by changing the media, and other growing conditions in addition to the media.

BIRD: That we have.

PAGE: But, all human pathogens fell onto this chart. And that the key to each of these columns, which would have a very small virus at the bottom and a pretty good size fungus at the top, that within that column there was a single T-protein.

105. BIRD: And these pathogens in a single column could transmute one into another depending on the medium?

PAGE: But they remain true to this one protein, they always had this one protein in them. Now this is what he saw with his microscope. Now if you take a step beyond this, and of course all the time he was looking for a cure for cancer that his mother died of when he was a child, but if you take a step beyond this thing then he could tell himself, "Well, gee, if I could just destroy seven proteins (or nine proteins or whatever it was) without hurting the human body, then I could wipe out all disease."

106. HUBBARD: Let me ask you also Mr. Page, did Rife have any interest, now Chris, this might seem very strange, but I have reason for it, did Rife have any interest in paintings, visual art? Did he ever buy any paintings? Was he ever in contact with any artist?

PAGE: You are tickling something way back in the back of my head but I can't bring it forward, sorry.

107. HUBBARD: Did he have any interest in watercolors or oil paints?

PAGE: Well back at this particular point in my life I could be confusing it with one of my aunts having an interest in this. I can't say yes, I'm afraid.

108. HUBBARD: As far as you know did Rife ever have any contact with a painter, an artist painter?

PAGE: If I knew I don't recollect. I know that he liked nice things. His home was always very neat and very nice.

109. HUBBARD: The photographs of the organisms that he had, did he have those enclosed in picture frames?

PAGE: Yes sir.

HUBBARD: He did? All right.

PAGE: With glass in front.

HUBBARD: With glass in front of them, and frames on the sides?

PAGE: Yes.

110. HUBBARD: Did he have most of his microphotographs so enclosed?

PAGE: Well, the ones that were hanging on the walls, in the hallway and in some of the rooms.

111. HUBBARD: You have no idea whatever happened with those, do you?

PAGE: No sir, I don't. Now, all of the ones that I saw were black and white. There were none in color. One reason I was particularly sorry when he had gotten rid of his microscope was, because, when, I had been kidding him about the thing you know, "Why didn't you ever drive it mechanically?"...Chris, that's that first picture down there on the first cover of that patent that has the light coming up from the two sides, coming up from an angle actually...

BIRD: Yeah.

PAGE: Well, it's a, you could call it a lamp if you want to. It's a section, in effect, a section of a cone, in Lucite, and I was using this to, well if the thing had been straightened out it would have been a long, narrow prism, well, it's a prism twisted around into a ring and up above it you get a spectrum and you can focus that spectrum on a particular place, if you replace your sub-stage condenser with this thing, and you illuminate it with a narrow ring of light. Well, I was fooling around with this, and one of my Professors at UCLA said, "This is just great, it works fine if

you're a three-handed microscopist, because you got one hand focusing, one hand on your mechanical stage, and this takes your third hand." Well he was right. But I had to show it to my dad, and he said, "Hmmm, that's very interesting." I had it all blacked out except for this narrow little slot in the back... and he took it out in the sun and he said, "Let me show you something," and he pulled out an old camera that he had. He had me turn this thing in and replace the camera lens with this. And he said, "Go down to the store and buy two rolls of such and such." And I went down and bought them. Now, he said, "Take a bunch of pictures and make sure you have a lot of color in them." So I take a bunch of pictures, humoring the old man, and he said, "Ok, you can turn one of the bathrooms into a darkroom and go in and develop this, and when it dries bring it to me and then I will tell you what to do next." So I did. And he said, "Yup, very interesting." Well, all I could see was a bit of fuzz on there. Well, then he had me look in there and roll it up again on the face of the other unexposed roll, and to go out and shoot against a white wall on the outside of the garage when the sun was coming down in the morning, just to get some light on there. Very crude. And then I developed that, and he says, "OK, now. Turn the camera around here and we'll shoot the light from the back with this projection equipment. And I could project colored pictures by projecting back through this thing and some of these were taken in front of Rife's laboratory. The Bocconvia was in bloom. There was the green of the leaves and the red of the tiles on the roof. I still remember the bright colors there. But, that's one memory that I have of that lab. Now there was somebody over there at that time working with him, doing some things. Now I remember telling Roy about this thing, at the time, going over and showing it to him. He said, "Yeah, but in effect, you cannot get true monochromatic light with that." And I said, "No, I realize that this isn't spreading the spectrum out, but that it is bringing it together to this focal point up above here, and I get rings of light, concentric rings of light and I have to go up and down with the thing and that's not going to work." So finally I put something else in there and fixed the distance. It was a nice system; it's so simple that it confounds people.

112. BIRD: I want you to tell the story to Professor Hubbard that you told me, right over again. There's a reason for this.

PAGE: Which story was that?

113. BIRD: The Company that you took the equipment to in Washington.

PAGE: To make a long story fairly short, I went to visit this company, I called them first and they suggested I bring this unit out. I took my microscope and my illuminator out. And I showed them the illuminator. There were three gentlemen there that owned this small company, one was the president, the other one maybe both others were, I guess, the vice-presidents. They were all three optical engineers. The recollection that I have is that each of the three of them had at one time worked for Bausch and Lomb and had, at another time, worked for American Optical. I could be wrong; maybe not all three of them had worked for both companies.

114. HUBBARD: Do you remember their names?

PAGE: I've got the names of one or two of them written down in my correspondence. I took the unit out. They were very much interested. I was out there several times. I was interested in getting a fairly inexpensive medical unit, make it available. I'm talking just about the illuminator. All you needed if you had a clinical microscope is a sub-stage condenser that will take a dark-field stop, and then you are in business. If you can't use it for true monochromatic light you can at least use it for what amounts to interference coloration and for phase microscopy. You can use a field of any color you want with contrasting illumination. You can see things that you can't

see without it. You can see living tissue without having to stain it. You can see inside the cells. You can see all kinds of things. You don't have to have a phase microscope or an interference coloration microscope. I was interested in seeing this unit get into clinical laboratory use and also to get into schools. In schools you could have a relatively cheap student unit made out of plastic; after all, my unit is made out of plastic, parts of it. I made it myself. And there is no reason why something like this couldn't go on the market fairly inexpensively. And it was either the second or third time that I was out there they told me that they had decided that the first unit that they would like would be a very expensive research unit, the optics would be all quartz. And I forget now what they were going to charge then, but that was a number of years ago, eighteen or nineteen I guess, and at that point in time they were going to charge what I thought was a terrible price. They said, "Well, it would be a pure precision instrument. It would be a wonderful thing for the whole research society, and the world at hand." And they could recoup all their costs of design and manufacture. Then, in two years or less they promised me that they would then be ready to start production of the clinical units and to be followed very quickly by the production of the very inexpensive student units. I was thinking of the student units in particular there because I thought, "Well shoot, if I decide it could work for the government, well, then as a hobby at least, I could start producing an awful lot of pictures and selling them because students in various courses in microbiology and parasitology I would like to have these because they can see structures and no one they really are they can see organisms really for the first time. Or they can see life in full color. This is a fascinating thing. You can see a rotifer sit there and try and gobble up an algae cell. I just like to watch them for hours. Anyway, the cells sell the pictures if they are pretty good pictures. But, the guy called me up, oh I guess it was less than a week after I had been there the last time, and they had been discussing it. One of them kept saying, "They won't let us make this. They will not let us make this." Finally I said, "Who is it that won't let you make this." Well, "Bausch and Lomb won't let us make this." And the other two were saying, "If this was American Optical they would stop us, but Bausch and Lomb won't stop us, they are not that kind of people." Well, the bread and butter item that this company produced, I don't remember what it was, but I do remember that it contained a small telescope tube of some kind that Bausch and Lomb manufactured and if they had to go to another producer to get this, they would have to go to an awful lot of expense. They would lose their market in the meantime, and so forth, and they might go bankrupt. Well, they never told me that Bausch and Lomb stopped it. The man called me up and he said, "I'm sorry but we cannot make your microscope." And I said, "Did they stop it?" And he said, "I'm sorry, I cannot answer that."

115. HUBBARD: Hmmm

PAGE: Those two companies got a great deal of their money from the sale of microscopes. Right in this immediate area, everybody worth his name as a researcher has three microscopes. He's got a research/clinical type scope. He's got a good interference coloration scope. He's got a good phase microscope. And two of those came from one of those producers and the other came from another one. Or maybe one of them is a Zeiss, or maybe one of them is from Nippon Kogaku or something, but at least two out of the three came from those two American companies and both of those companies they told me are run by their sales division.

116. HUBBARD: Oh, I am sure if this. No American manufacturer of microscopes is going to put anything out on the market, which would cause it to lose money substantially. That's for sure.

PAGE: With this, if you have a good research medical type scope you do not need to have a phase microscope to go along with it. You do not need to have an interference coloration microscope.

117. HUBBARD: Well, now Mr. Page, for me to form any opinion about your illuminator or any system of microscopy you have, I would have to examine it and preferably I would want to use my own specimens

PAGE: Well, Professor Hubbard, I'm not trying to sell you on my microscope. I was simply using this to explain the Rife unit, its basic thesis of illumination, is one that other people can use. If someone wants to use my illumination system they can make it themselves. I have told a lot of people how to make it. I don't keep it secret. It is patented. The patent is about to expire if it hasn't already.

A Discussion follows dealing with Page's patent, the number, the time until expiry, his intent on what to do with it.

118. HUBBARD: The question that I am trying to resolve for myself is the lateral resolution that is shown in these photomicrographs in the Smithsonian Institute report. The lateral resolution here on that section of the spore is nothing short of fantastic, nothing short of fantastic, in the most strict sense of the word: fantastic. That is how I would have to describe the resolution seen there.

PAGE: The only thing you've seen like that is in electron microscopy isn't it.

119. HUBBARD: It's better than the electron microscope.

PAGE: OK, I'll go along with that.

120. HUBBARD: Now, the whole thing for me is whether or not there could have been some fraud involved in the production of these photographs. Let me ask you, was there ever anything as a child, or in your associations out there with Rife that would have made you even suspect that Rife would have been fraudulent?

PAGE: No sir. Now, he was either one of two things. He either was as he saw it: one of the greatest minds of his time, or he was a complete charlatan. And if he was a complete charlatan he was even more brilliant.

121. HUBBARD: He certainly was fooling a lot of people for a lot of time if he was a charlatan, wasn't he?

PAGE: He couldn't continue to do this. So he would have had to be even more brilliant because he would have had to fool everybody.

122. HUBBARD: Now, Mr. Page, I will, of course, be interested in reading your patent. And Chris I will probably be in touch with you and Mr. Page at a later time after I get to digest and work over a few more things here.

PAGE: I gave Chris two other patents also, just to bring out a point. There are many ways to use this type of illumination, which Rife had. These other two pertain to, I've given all three of these to the Navy, the other two pertaining to the quick detection of pathogenic organisms, in the air and in the water. These also require the use of the so-called resonant frequency that we talked about, the resonant light frequency that would illuminate the particular dominant processes in them. Everything I had was taken away.

123. HUBBARD: What's that, everything you had was taken away?

PAGE: Yes, taken away and locked up and after that I couldn't even talk to people about it. And finally a friend of mine up in Fort Dietrich pulled some strings and got it shaken loose. Now a co-inventor on one of these, he was a Naval Reserve Officer also, we both made Captain at the same time, he was in the Civil Engineer's Corp and I was in the Medical Services Corp. We figured this thing might have some value in the brewery industry but it was never used.

124. HUBBARD: This is a very strange story Mr. Page.

What follows is an exchange of patent numbers and dates for the other patents.

PAGE: Now when I say that all of these papers were taken away from me, those other two devices, they said they had potential use in biological warfare detection equipment.

125. HUBBARD: Were you developing any of the work in a Naval laboratory or was this in your own personal laboratory?

PAGE: In my home.

126. HUBBARD: In your home?!

PAGE: The early one, the microscope one, I built not even in this house but in an apartment where I lived.

127. HUBBARD: And you did all of the research work on this biological detection system in your home for these patents?

PAGE: I have a bunch of other patents too.

128. HUBBARD: But let me make it very plain and to the point: You did certain work, you did all of this work, exclusively in your home, with this Jack Terrill, developing a biological detection system, and subsequently after you made the patent application, or was it after the patent was granted, that the papers were taken from your home?

PAGE: The papers were not taken away, we had to deliver them. We were told, "Bring 'em in. Bring 'em in, this is classified"

129. HUBBARD: Who told you to do this?

PAGE: The Navy.

130. HUBBARD: The Navy told you to do it.

PAGE: And we were happy to comply.

131. HUBBARD: Well, you were on active duty, or were you inactive?

PAGE: No, we both worked for the Navy as civilians.

132. HUBBARD: And what type of work were you doing at that time for the Navy?

PAGE: Biology.

133. HUBBARD: Microbiology?

PAGE: No, I didn't say micro.

134. HUBBARD: Just as biologist.

PAGE: I have worked as a microbiologist sometimes for the Navy but I am doing about the same thing I was doing then, ummm

135. HUBBARD: Now, let me ask you this, in your opinion, could it be legally claimed that the inventions that you and Mr. Terrill worked on, that these inventions came out as a result of your professional activities for the Navy?

PAGE: Well, generally yes, we gave them to the Navy.

136. HUBBARD: Well now, the thing is Mr. Page, what I am trying to get to is whether or not the inventions were really a consequence of your association with problems encountered in your work with the Navy.

PAGE: That was with my work at that point in time, my work in uniform at some other time.

137. HUBBARD: It is customary, of course, for many corporations to require employees to sign over rights for patents.

PAGE: Well that's not why this was given to the Navy. This was given to the Navy in the hope that they would go for the patent and it wouldn't cost us the money. The Navy works in three different ways here. If somebody is working in a Navy laboratory, they are assigned to work on a particular thing, they can work on it, they make an invention and the invention is patented. The invention is the property of the Federal Government. It is always issued to an individual, so the inventor's name appears on it, but the individual has to sign all rights over to the Federal Government. If a person works in a government laboratory, and they come up with an idea, all their own, and they go to their boss and they say they'd like to work on this, and he says, "No, we are too busy on project XYZ."

"Can I come in at night and work on it?"

"Well, that's up to you, if you want to then you've got a key."

"Well, can I use any of the facilities here?"

"Well, yes, you'll be using the building."

Now, depending on how this is interpreted, if he uses materials, as well as electricity and so forth, then they may require that it becomes the property of the Federal Government. On the other hand, they may be a little bit lenient, and they may say that he may have it, that they will obtain the patent, that it will be in his name, but that the Federal Government to use it, or to buy it, royalty free. That is still a public service-type patent but it does not preclude the patent owner, and in this case, the individual who owns the patent, it does not preclude this owner from charging royalties to other manufacturers, or users. But the Federal Government may use it royalty free. Or the Government might buy something on a royalty free basis. Now, the third system is, if somebody is working, on his own, and has no connection with the Federal Government, he doesn't have to be an employee of the Government, but if he has something

that he thinks is a value to the Government, he may take it then to the Government. And in this case I was not only a Navy employee, and one of the people at the Patent Branch of the Office of Naval Research was a friend of mine, he was in my Research Reserve Unit, so I took it to him, and several other patents later on. But, in these cases when the patents were issued they were to me. Now I would not have to have been working for the Government, I could have been a total stranger taking this to some patent branch place like O and R. But I think this would be of some value to the Federal Government. I think that for the Government this should be a royalty free patent, and to the Federal Government, I'd like to retain rights of my own "Does the Navy have enough interest in this to go for a patent?" Then it's up to the Navy to say "Yes" or "No", to study the thing and say, "Yes, we have enough interest in this, we'd go for a patent, and we will do that, just sign all of these papers." So those are the three different systems they use in Government inventor instance.

138. HUBBARD: Mr. Page, let me go back to Rife. Did you ever hear Rife say that any of the prisms had been stolen from his big universal microscope?

PAGE: Well, the only prisms that I know of he had on the far side of it and those are the ones that you get at with those little knobs with the cables, the cable mounts.

139. HUBBARD: But he never said anything about any of the contents of the inside of his microscope being stolen?

PAGE: No sir. I would sure like to have had it though. I hope to build one something like that someday but with considerable modifications to it. A bit smaller and twice the diameter, and one that would change that resolution by shifting. Now what I had designed may be precisely what he had. I don't know what he had inside that big barrel.

140. HUBBARD: Do you remember whether there was a big glass case enclosing his microscopes?

PAGE: There was a case called "the gun-cabinet". It's going to be here in this house in two or three weeks, but it will have shelves in it. He had some microscopic equipment in there, I don't remember just what, in there at one time, and another time he had some guns in there.

141. BIRD: Why is the case going to be in your house? Did he give it to you?

PAGE: No, he didn't give it directly to me. He gave it to my parents, and my dad put shelves back in it.

142. HUBBARD: Is your daddy alive?

PAGE: No, he's dead.

143. HUBBARD: Is your mother alive?

PAGE: Yes sir.

144. HUBBARD: Ahhhh, did she know Rife?

PAGE: Oh yes.

145. HUBBARD: Did she ever go over to the house?

PAGE: Oh she's been there a few times. I can't tell you how often.

146. HUBBARD: She never had any interest in Rife's inventions did she?

PAGE: No, she didn't understand it. My older brother understood him. He's dead also.

A discussion follows about which of Page's family might have known Rife, and when.

End of interview.

Hubbard interviews Page for the second time.

147. HUBBARD: Captain Page, this is Dr. Hubbard up in Buffalo.

PAGE: Yes sir, good to hear from you.

148. HUBBARD: Well, I'm calling tonight because Chris Bird and I were talking over the phone this afternoon and he was reviewing some of the high points that you had made to him about Rife's work and one point in particular I was curious about: Chris said there were mirrors used in one of Rife's microscopes?

PAGE: No, I didn't say mirrors; well I had mentioned mirrors to Chris when I talked to him. I was quoting, as nearly as I could, a conversation that I had with Roy. He had told me that he used no..in this latest scope, we were sitting there looking at it you know, and it wasn't in operating condition at the time. And he was standing there bragging you know, "There is no spherical aberration! There is no chromatic aberration!" I used to like to kind of tease him cause he used to like to be a little bit mysterious, you know, just kind of teasing. I said, "Why sure, you get away from the chromatic by using quartz." And he had used quartz in some of these instruments. And he said, "Yes, but I get completely away from the spherical aberration." And I said, "Yeah, well, you told me a few years ago you were grinding parabolic lenses." And he just kind of beamed and said, "Yes, and not that many people could do that," or words to that general effect. And I said, "Well, the easiest way to do it would be use parabolic mirrors like the astronomers do." And he looked at me like somebody had just discovered his secret." Now, I didn't mean to tell Chris that Roy had DONE this because I am not sure that that's what he did. He never opened up the thing and said, "Here, look inside." But he looked like somebody who'd just been, you know, like a kid with his hand caught in the cookie jar. And he switched the subject, just bang, like that, and started talking about the illuminators. And if I remember rightly, that was just before I went to Korea, and I was coming through, and on the way north, and when I came back, I carried everything and a microscope that I had bought in Japan and had shipped home to my wife who was living with my parents on Point Lorna at the time just a block from Roy's I place. And then I took the thing over to him and he gave me a, you know, I should have taken my car, it's just through the block, and I walked through, and I took the scope, and I went back and got the illuminating device, the illuminator, and then I had to go back again for a third time for I the transformer, and he got kind of provoked at me and he disappeared for a while, and he came back with a box with a one pound camera...

It gets confused and illegible for about 20 seconds

I was kind of teasing him because he had this tremendous ego. He was recounting again how he'd go through the spectrum very, very slowly, and every time something would light up he would snap the shutter again. And as I said once in a while I would kind of tease the guy because he has this tremendous ego. And I said, "Well gee, you know, nobody else in the whole world has ever had the brilliance and the intelligence go through this and do this that and the other." And he just kind of beamed, you know, and I said, "Yet you spend an hour and a half to two hours taking one picture." I said why the hell don't you drive this thing mechanically?" And he looked at me kind of crest-fallen and said, "I don't know Bob, I just never thought of it."

148. HUBBARD: Well Mr. Page, the thing design-wise that would have been a vast improvement mechanically, would have been to have had the microscope as an inverted microscope, if you are going to be looking at living material in aqueous media. I think this is one of the big problems. By the way did you look through the microscope yourself?

PAGE: Not anyone of his models, no.

149. HUBBARD: Well, one of the problems he must have had is that the specimen shifted, the specimen would probably shift.

PAGE: Oh it couldn't help. In an hour-and-a-half to two hours, it's just going to move all around.

150. HUBBARD: Well, with evaporation of water from underneath the cover-slip...

PAGE: That'll do it right there.

151. HUBBARD: Did you ever see him put any fingernail polish on the edge of a cover-slip to try to stop evaporation?

PAGE: No sir, I've been in his lab a number of times but I never watched him working.

152. HUBBARD: Well, one of the things I am not having much success right now, frankly, with Mr. Crane. I am sorry to say.

PAGE: I mentioned something to Chris, and I need to expand on that at this time, well, two things. One is this has kind of stimulated me and I broke out my microscope illuminator, and there is one thing that I never did properly, and that's what I was teasing Roy about, not having ever done it, was to design the thing mechanically. And the system that I show, or that is shown in the drawing on the patent is not a very good system because the light is missing most of the time and yet they have a high intensity lamp. What I fooled around with one time, and I'm not going to built it, I can never get the time is to put a mirror on the end, a revolving rod so that you don't have any vibration, and it still is at a very slight angle, and it will move the spectrum just enough to shift through it and then you can change the speed on the thing so that if you want to take motion pictures you can speed it up, so I might be able to get enough time to put this thing on this and if it doesn't vibrate and shake too much, maybe I can bring it up and show it to you.

153. HUBBARD: Well, now, Mr. Page, I'll have to see what Crane and his associates are willing to do. He wanted a bond of about a quarter of a million dollars on me.

PAGE: For what?

154. HUBBARD: If I took the microscopes.

PAGE: Oh, I was just talking about the illuminator and that system which I can work with any system. It is based completely on what Rife did. I have had a lot of talks with him and I talked to him at quite some length. I went to UCLA for a short period of time, and while I was up there I spent more time fooling with this than I was on my schoolwork. I would bring stuff back home every time I'd come back and show him what I have done so far. I took a circular prism, for instance, well, that's fine but it needs a three-handed microscopist, and that would go on step by step. And before I went to Korea I told him what I thought I was going to do and when I was over there I changed my mind. And there was that stuff in the Life magazine that came out and my folks sent it to me, and about the time that I got the copies of it, it had come out in the Tokyo addition, that's when I was buying a microscope, and that's why I got invited into the talk with the President of Nogagigaku, and with his Chief Engineer. The system that I finally came back with, I told Roy about it, what I was going to build, and he thought that was just fine, and he was convinced it would be at least as good as his and much more versatile, as good if it were built with quartz. And I said, "Well, how about some of the modern plastics?" well he didn't know. But at least if it were built with quartz it would be as good as his, provided you had a good microscope. And I that's why I said, "I'm talking about the illuminator and not the microscope." It's basically his with some additions and it will give you any type of optical illumination you want. Now the patent is out, or about to run out, so I'm not getting anything financial out of this, but I'm going to have more spending money after I retire than I've got now. But the gadget will provide focal optical staining, it will provide light line phase or dark line phase, it will provide interference coloration, you can switch back to white light and look at the same material. With the oblique illumination it's not really outstanding for aspect?? sections, illumination is not good for?? aspect sections. You need as nearly to direct illumination as possible with any?? aspect section. If you've got smears, you can have the field one color and the object a contrasting color, any contrast you want. And you can have different parts of the spectrum for the field and for the object, take your pick. So, it's very, very versatile and it should be quite inexpensive.

155. HUBBARD: There is a vary-color phase unit now; I'd have to study though the comparison with the patent drawing you have sent me.

PAGE: I haven't tried to keep up with what's been happening in this field. I don't have any reason to. I've degenerated into a pencil-pushing, paper-pushing desk jockey of the worst possible bureaucratic sort in the last few years, which is one reason I am going to hang it all up, you know, I sit there and talk on the telephone, dictate letters, attend meetings, that sort of thing. It's not much fun.

156. HUBBARD: I wanted to clarify some of these points that Chris had brought up, and I'm glad to have had the chance to chat with you tonight.

PAGE: Well, you know, you can do what Rife did if you use parabolic mirrors. The same thing an astronomer does.

157. HUBBARD: In the light source?

PAGE: Umm

158. HUBBARD: Of course, parabolic lenses have been used; mirrors have been used in UV microscope objectives.

PAGE: Yes sir.

159. HUBBARD: They have been used for quite some years.

PAGE: The heart of the thing consists of parabolic mirrors; you have overcome both chromatic and spherical aberration. All you've got then is your objective, and your eyepiece, and your ocular, and everything in between, and then you can overcome, for practical purposes, the spherical aberration in the magnification.

160. HUBBARD: Let me ask this Mr. Page, could you make a sketch of your understanding of how you and Rife were thinking of applying these parabolic mirrors?

PAGE: Well, I don't know exactly what was going through his mind.

161. HUBBARD: Well, could you make a sketch of what was going through your mind?

PAGE: Well, there is a, or at least there used to be, a used to see ads in Scientific American, I used to subscribe to it, and I stopped because I never got time to read it all, a very short barreled telescope that was fairly expensive and they always were advertising this and that they were used by photographers to take pictures of birds and things at a considerable distance, and I don't remember the name of that telescope, but it's a, well, I guess by looking at the thing, it might be twelve inches to...

162. HUBBARD: I think that's the Celestron.

PAGE: That's not the name I remember, but...

163. HUBBARD: Or Quasar?

PAGE: That's it. The Quasar. And it's a fairly short-barreled, wide-bodied thing...

164. HUBBARD: Yes, yes.

PAGE: It's simply a light gathering device that focuses and reflects back through the center. It's the simple type of parabolic, reflecting telescope that you can devise. And all you need is your objective lens system at the other end of it, and that's it, you know, pretty well. The system is very, very simple. Now there isn't any reason at all why he couldn't have had that in this great big fat... (Laughs) You know you can take one of these Quasar things and stick it in the barrel of that microscope barrel that he had and pretty well substitute it right there. I bet you that's what he's got, I don't know.

165. HUBBARD: Well, I think there's more to these quartz prisms, these rock quartz prisms, than simply a matter of getting rid of chromatic and spherical aberration. You see, you get a polarization, an ordinary ray and an extraordinary ray, and you have the opportunity of recombining and getting an interference pattern and I suspect that Rife had interference phenomena worked out in those quartz prisms of his microscope.

PAGE: Well, even I have been getting some of that too. But as far as this magnification in a short distance goes, the astronomers have been doing that for a long time.

166. HUBBARD: Yes, yes, that certainly is true.

PAGE: With very, very good resolution.

167. HUBBARD: Yes. Well, Mr. Page listen, are you going to be home the rest of this month? A discussion along with the trading numbers and setting up arrangements for future correspondence is made.

End of Page interviews.