Dr. Harry Keiser, Clinical Director of the National Heart, Lung and Blood Institute,
Division of Intramural Research at the National Institutes of Health.

July 1, 1998

Interviewer: Melissa K. Klein.

The subject of this interview is Dr. Keiser's memories of the Clinical Associate Program.

Klein: Dr. Keiser I will be recording this interview. Are you comfortable with

this?

Keiser: Sure.

Klein: Dr. Keiser, could you begin by perhaps giving me a brief background of

your childhood, where you attended college and what made you decide to

pursue a career in medicine?

Keiser: I was born and raised in Chicago, Illinois. My father was a physician, a GP

and general surgeon. My mother was a graduate of the University of

Chicago. That is actually where they met. They both were born in Iowa,

and ended up meeting while both were students at the University of

Chicago. An interesting anecdote was that I was born in August of 1933,

and my mother wanted very much to attend the Century of Progress

exhibit which was going on in Chicago. As a sign of the times, she was

stopped by numerous people on the street and told she ought to go home

because they were afraid that she would go into labor. However, she

persevered and then heard that the fair was going to be continued the

following year. After learning this, she went home and I was born in

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August. I went to Northwestern University for both my undergraduate and graduate school. Between my sophomore and junior year in medical school, I became aware of the fact that I would not get any taste of research in medicine at Northwestern. I heard that the eastern schools gave students a chance to do some research. I went and asked the 'question' and ended up working with Dr. Gene Stollerman on streptococcal disease, more specifically, culturing streptococci in the laboratory and seeing patients with rheumatic fever in the clinic. I think that, probably more than anything else is what got me started in research. I spent all of my free time in the last two years of medical school working in Dr. Stollerman's lab. I interned at Philadelphia General Hospital and did one year of training in internal medicine at the VA Research Hospital in Chicago. I came to the NIH in 1960, on the suggestion of Dr. Stollerman, who felt it was a waste of time to go into the military. I was told that I should instead go to the NIH. I have to admit that I had never heard of the NIH at that time nor had hardly anybody I knew of heard of the NIH. So, I applied and I ended up coming here.

Klein: You applied to be a Clinical Associate at the NIH?

Keiser: Yes, I applied to be a Clinical Associate at the NIH.

Klein: Did you learn about the program through a mentor?

Keiser: Yes. There were no ads that I was aware of at the time for it. It was basically my mentor Dr. Gene Stollerman who said, 'You ought to consider going to the NIH.' I did not know a thing about it. I went through

the process, in those days you applied two years in advance. I was in my internship up in Philadelphia and I drove down to meet Dr. Robert Berliner, who was the Scientific Director of the Heart Institute. I was very nervous about coming down. I had been on a busy service and had trouble sleeping, so I decided to take a sleeping pill. That was a fatal mistake because I proceeded to oversleep by about two hours. The next morning I woke up in a full panic, hopped in my car and tried to drive down to Bethesda. Well, of course I-95 did not exist as we know it today, and the Beltway did not exist, so I had to turn off onto East -West Highway over at Laurel and come across the county. I proceeded to arrive just about lunch time and I met his secretary Ruth Townsend who was very nice. She said, 'Well, he's gone to lunch so why don't you go to lunch and he'll meet you at 1:00 p.m.' I was really perplexed at that time. I went and got some lunch and came back at 1:00 p.m. Dr. Berliner had other appointments but he gave me all of about five minutes. He asked me what I had done, and why I was interested in the NIH. I told him that I had worked on streptococcal disease and rheumatic fever. He then proceeded to say, 'Well, we don't do any of that here,' and a couple of more things which were not any more encouraging. As I walked out, I was told that I should have interviews at two other Institutes that day. I quickly decided Heart was the one I wanted to go into because I did not like the other two Institutes. I do not recall what the other two were, but I remember that night I was really crestfallen. I drove back to Philadelphia and I was sure that I had missed my one

chance to come to the NIH. I was then very pleasantly surprised to learn several months later that I was accepted.

Klein:

Let's back up a little bit. If you had not come down to the NIH what did you consider as your options?

Keiser:

Well, you had to do an internship and then at least two more years of internal medicine residency training. I could have done that at any one of Northwestern's hospitals. I was in line to be Chief Resident at Northwestern hospital. I ended up coming to NIH for two years, and they talked me into staying for a third year. At that point, the Heart Institute did not have an accredited third year program in internal medicine. I looked around for where I could go. I interviewed at a number of places; Duke, Mass General and San Francisco. I ended up going to the University of California in San Francisco. I spent a year out there, and then I came back for a year of government pay back because I was in the Commissioned Corps. That one year has stretched into 38 years.

Klein:

Were you a participant in the Berry Plan?

Keiser:

No.

Klein:

Besides the words of your mentor, what else attracted you to the Associates Program?

Keiser:

Just the chance to do some clinical research. As far as I know, I was only the second physician from west of the Appalachians, to be accepted as a Clinical Associate in the Heart Institute. Up to that time, the Clinical Associates program at the NIH was mainly for the people of the 'Eastern

Establishment.' Walter Bauer at Mass General and the people at Columbia, Cornell, Johns Hopkins and Duke, basically had unwritten rotation plans that they could set up. Walter Bauer would send several Fellows down here in rotation for two years, and it was automatic. I was only the second from the west of the Appalachians, and the first was Dick Crout.

Klein:

What made this program so elite? Why did everyone from these schools want to go here?

Keiser:

Well, at that time there was a tremendous esprit de corps, it was really a wonderful program. They had almost 10 applicants for each spot. In other words, they did not take that many people. It was a place where everybody said you could do research. My boss at the time said, 'Harry, it's the place to go and I think you ought to think about getting a Ph.D. along with your M.D. while you are out there because those are things you can do.'

Klein:

How many other Associates came in with you?

Keiser:

In my class, there were a total of six of us.

Klein:

Do you recall their names?

Keiser:

There was Bruce Bauer, Tom Gaffany, Wes McBride, Tom Merigan and Bob Levine.

Klein:

Do you know what they are doing now?

Keiser:

Bob Levine is a famous bioethicist at Yale. He was also at Irvington

House at Hudson. Wes McBride has passed away. Tom Merigan was

Chief of Infectious Disease at Stanford. Tom Gaffney went to the

University of South Carolina at Charleston and became the Chairman of the Department of Pharmacology. He then left and went into industry.

Bruce Bauer is the one I have lost track of. I think he went into practice somewhere up in New England.

Klein: These are pretty prominent positions.

Keiser: They did all right.

Klein:

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Klein:

Keiser:

According to an article in the May/June 1964 edition of the House

Physician Reporter, the CA position was highly prized because the 2 years

of service required by the program satisfied a participant's military service

obligation. Did this in any way influence your decision to apply to the

program? Do you think the program would have been as popular had this

not been the case?

I think the draft definitely influenced us to come here because you knew that it would take care of your deferment and your military service without going into the regular draft. Would I have still come? I think so, but it was a strong inducement. There is no doubt about it.

Were you opposed to fighting in the Vietnam War? Were you afraid of dying, or was it because you opposed American intervention?

I would have enlisted, probably in the Navy, if they would have taken me with my glasses. To get into the Public Health Service I had to have a waiver on my eyes. Then to stay beyond the original two years it had to be waived again. The requirements were pretty strict. But to answer your question, no I did not have an objection to the war.

Klein:

Did you have a uniform as a Commissioned Officer?

Keiser:

Out of 38 years, for the first 33 I did not have a uniform. It was probably about five or six years ago, I was getting an award and I was told that I would have to have a uniform because they would no longer hand it to you; they had to pin it on your uniform. At that point I said 'OK' and I went out and got a uniform. What is funny about it is that my new bride of about six years, was the widow of an Air Force officer who wore his uniform very frequently. For her to then be married to a man who is supposedly in the service but does not have a uniform was totally surprising.

Klein:

Describe the "feeling" on the NIH campus in regards to President Johnson's Vietnam Policy.

Keiser:

When I arrived it was 1960 the Cuban Missile Crisis was the hottest issue. I'll never forget the graffiti that was on the walls of the men's room which said, "Welcome to Ground Zero." We were told that the Clinical Center Building was specially built so that it would have the ability to withstand X number of pounds of overpressure. To those of us that had some knowledge, it seemed silly because if they dropped an atomic bomb on downtown Washington we would all be history anyway. That's what I think caught everybody's attention. There was a concern about what was going on in Cuba and the whole nuclear war problem. Kennedy started the Vietnam War in 1960, and then it kind of escalated from there. So I do not know when people here might have gotten really into it.

Klein: When you returned to the NIH after San Francisco, what was your

position?

Keiser: I was a Scientific Investigator.

Klein: Did you interact with the Clinical Associates?

Keiser: Yes. I spent my time in Al Sjoerdsma,'s group which did Clinical

Pharmacology. We always had Clinical Associates.

Klein: Was it was ever discussed why they came?

Keiser: There was not much discussion about it. During that era, we were here

and we were doing science. Everybody had their opinions about the war.

But in terms of what went on out here, it seemed to be fairly isolated.

Klein: In 1967 Science reported, "NIH is different, ... it really isn't like a

government research establishment." However, just two years later Science

reported that "For better or worse, federal policy making on health matters

and therefore on biomedical research is being politicized. And this, as well

as the Vietnam War budget squeeze, has abruptly brought to an end the

decade of remarkable growth in biomedical research which is already

being remembered with nostalgia as the good old days at NIH." What do

you think caused this shift in opinion? Do you believe that this view was

the general consensus among NIH researchers at the time?

Keiser: NIH has always been kind of an 'ivory tower.' People came and people

stayed because you could do research and you did not have to get

political. In general, you were protected from it. In those days, you hardly

knew who your Institute Director was. The Institute Director went before

Congress, testified on the Hill, and got the appropriations. He did not determine what went on. It was the Scientific Director and under him the Branch Chiefs who determined what went on. It was a pretty heady environment, in that you could do the research that seemed appropriate. By the same token in those early days, the Scientific Directors always had enough extra money, positions and space, that they could reward programs that were moving forward and so it was really a very nice situation. The last couple of years, things have once again started to open up. But, there was that intermediary period where budgets were tight and we were being squeezed. If one Branch Chief got something, it had to be taken away from someone else because it was a zero sum game. During that time, it was not as much fun. I remember my previous Scientific Director, Dr. Jack Orloff, would go around and say, 'Well, are you having any fun today?' Bob Berliner who was the Scientific Director from 1955 to probably 1965, clearly had a good time and really enjoyed it.

Klein:

Kaiser:

way hinder your ability to conduct top quality biomedical research at NIH? I don't know that it ever did. The Heart Institute has been pretty well protected. It is one of the lucky Institutes whose monies have usually been adequate, more than adequate, to keep us going. Politicization did occur and it is reflected in the name changes. When Cancer was made a separate Institute, the President felt that he could start appointing Institute

Directors. That is when the politicization began to occur. That was the first

Did government interference and the Vietnam budget squeeze or in any

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time Institutes seemed to want it, but then they realized they were going to have to pay for the advantage and that's when the political axe began to fall. Before then, the head of NIH, and the selection process was pretty much isolated from Congress.

Klein:

Dr. Rall said that Marston got a lot of heat for not doing enough to keep the researchers and the scientists here under control.

Keiser:

The NIH has always been fairly liberal. Scientists are not silent, they will express their opinions. Of course, how much of that gets reported or whether the White House gives a damn, I do not know. Clearly Johnson was very sensitive to what was going on and to what was said about him. Obviously, that is why he did not run again. How much of this actually affected the NIH, I do not know. But there is something else that you have missed. When I came to the NIH, the person who was made Surgeon General by John F. Kennedy was Luther Terry. Luther Terry had been Chief of General Medicine and Experimental Therapeutics in the Heart Institute. Then he was appointed by Kennedy as Surgeon General of the United States. Here is a man I had gotten to know in six months. I was living in Georgetown in a little one room apartment and to go to sleep listening to the news and to hear that Luther Terry had been chosen Surgeon General was a tremendous thrill. Then, to come in the next day and to see him and to be able to shake his hand and so on was very exciting. What you do not realize was that in those days when Luther Terry went down on the Hill, he took special care of the members of the

appropriations committees for both the House and the Senate. If they had a problem, they would come out here and stay in the VIP rooms up on what was then the 13th floor and get their care. This had quite an effect, it is the reason the NIH budget continued to increase all the time. I remember seeing the electrocardiograms of the speaker of the House Sam Rayburn and others, come through on a regular basis when they would get their medical care taken care of by Luther Terry. Now of course, we are told just the opposite: 'VIPs do not come in', 'we will not do anything special for Congress,' 'they can go across the street to the Navy or to Walter Reed,' and it makes one hell of a difference.

Klein: So the 'good old days' at NIH were in part because of this VIP treatment?

Keiser:

Klein:

Keiser:

Klein:

Keiser:

I think it helped. We took very good care of those people and I think they took very good care of the NIH.

What type of activities did you participate in at NIH after you completed your training as a CA?

I worked in three different areas: hydroxyproline and collagen metabolism, the kinin–kallikrein system, and hypertension, pheochromocytoma and vasoactive substances.

Could you have done this type of research anywhere else besides here?

Probably not the first two areas. However, the hypertension,
pheochromocytoma and vasoactive substances work could have been done
elsewhere.

Klein:

How did participating in the Clinical Associates program help you in this work?

Keiser:

Well it gave me experience in basic research, which I have to admit as a young physician in those days I was all thumbs. When I got out of medical school having taken biochemistry, column chromatography had just come in. I remember our chemistry professor saying, 'We're showing you paper chromatography. If you can imagine cutting the paper up into very, very fine particles, making a column out of it, then you have column chromatography.' When I arrived, Sid Udenfriend, a Ph.D. was head of the lab next door. He had a number of people either with a Ph.D. or who were training for a Ph.D. Well, all of us would be here practically every night and these guys taught me practically all I know about biochemistry. It was wonderful. Most of us in those days were bachelors, we would come in the morning, we would go down and have lunch in the cafeteria, and then go back down for supper. There were big round tables where people would come, eat, take part in the conversation and then go back to whatever they had to do. You would work late, go home and come back the next day and do the same thing. It was great because it was a great learning experience, and you met foreign scientists from all over the world.

Klein:

It seems today that the number of CA applications has dropped

dramatically, and I wondered why that is the case since former CAs are now holding high positions at the NIH as well as at other esteemed institutions all over the country?

Keiser:

Unfortunately, the problem is that you can get better clinical training at other centers than here. The NIH is limited in terms of the scope of its Clinical programs. The Heart Institute is a classic example. We do cardiology, but a number of years ago because it was so frightfully expensive, we stopped doing cardiac surgery. We do not get a general mix of cardiology patients to give a full training experience. We do not see patients with acute myocardial infarction or unstable angina. The Clinical Center is not set up for them. If you look at pulmonary, it is the same way. Pulmonary concentrates on certain basic diseases such as alpha-1 antitrypsin deficiency, Lymphangioleiomyomatosis [LAM] in women and cystic fibrosis. Those are two common diseases and one rare disease. One does not get the exposure to pneumonias and the more common things that you would need. What you end up having to do, is create a mosaic program where you send people away for a year, to another center either downtown or to Johns Hopkins. You can get better clinical training elsewhere. So, if you want to take two years to become a really well trained clinician you really tend to go elsewhere. Maybe then, you might come back to the NIH to do research.

Klein:

Dr. Rosen had a theory that one of the reasons that the Clinical Associates

applications are dropping is that there is a disrespect among basic scientific researchers for clinical research.

Keiser:

I do not know how that would make a difference. But I'll tell you what does make a difference and that is, debt. These young people now run up tremendous debt. That is, by the time they get out of medical school, these young people run about \$100,000 to as much as \$150,000 dollars in debt. Moreover, the loans are no longer interest free until you get a normal job. Very frequently, once you complete your formal residency training you have to start paying them off. These people will generally decide they will have to find a sub-specialty that is going to pay them some money, and that means procedures. Then, they will find a residency program where they can very quickly learn those procedures and complete their training. Then they will often leave and avoid the research aspect entirely. I have had programs with Georgetown and if you talk to professors there, they will tell you that in the old days people would spend an extra two or three years really becoming adept at their specialties. But now, as soon as they develop the skills to do the procedures and satisfy their training requirements, they are out the door, hanging the shingle up, trying to pay off their debts. I don't really think in terms of Clinical Research, that we have a chance once the guy has completed his clinical training. That is why I believe so strongly in the Clinical Scholars Program. I decided between my sophomore and junior year in medical school. I think you have to get people early. You have to give them a taste of research before

they start making money. Steve Rosenberg, head of cancer surgery at the NIH, is a great example. We could never have afforded Steve Rosenberg once he had gotten established. We got him very early, he came down from Harvard. He was a fantastically well trained young man who wanted to do research. Neither he nor his wife had tasted the 'high life' yet, so they were willing to come down and continue the struggle which is the way the rest of us were. Unfortunately, you do not make a lot of money working for Uncle Sam.

Klein:

You mentioned the Clinical Scholars program. What is that?

Keiser:

It is a brand new program of the National Foundation for

Biomedical Research. I am going to be a volunteer now that I am retiring. It had its first group of Clinical Scholars last year. It allows people who have completed their third year in medical school to come here for a year to experience clinical research. They will have a mentor who will give them experience in the laboratory, as well as experience in taking care of and doing studies on patients. What I would propose to do is to help mentor these young people. Last year, they started with nine and this year they are going to have fifteen and eventually they hope to have thirty

Klein:

participants.

This program sounds like a step in the right direction. What else can the NIH do in order to get the 'best and the brightest' applicants?

Keiser:

Well, I think you are precisely right. We are not getting the 'best and

the brightest' anymore. I have talked to a lot of physicians out there, and it is obvious we are not. The 'best and the brightest' are not happy with the way the HMO has come out. They are going elsewhere; they are going into business and other places where they think they will be rewarded. I think you have to get them early. The other thing I would like to do is to see some loan forgiveness. We originally had a loan forgiveness program for AIDS. I was part of that group and then it was expanded to people who were deprived either economically or socially. There are now three parts of that program. It seems to me that should be expanded, specifically for those individuals who are going into clinical research. It is a long road. You have to go to medical school, you have to go through routine internal medicine, you have got to go through a sub-specialty and then you have to get clinical investigative experience. The establishment of the CORE courses in clinical pharmacology and in clinical investigation is very important but they are not enough. I think you have to be able to defer loan repayment for these kids and also let them get debt repayment. Otherwise, we are just not going to get them. In fact, I should mention that we are doing away with our PGY3 in internal medicine at the Heart Institute for three reasons. First of all, the Board of Internal Medicine came down and examined us and felt that they did not want any free-standing programs. Ours was the only third year free-standing program. They no longer wanted it because they were afraid that other universities and medical schools might sue them which I think is a farce. They just did not want us

because we were not ACGME approved. They said they would continue to approve us up to the group that would graduate in the year 2000. As I looked over the program in the past few years, two things are obvious. One, the program has not served as a source of supply of fellows to go into the other residency training programs at the NIH. We have an inter-Institute endocrinology training program and so on. Very few have gone in from the Clinical Associate into one of the other residency programs that we have. The second thing is, almost nobody has gone into research from those programs. We are not developing the bright young researchers that would come and take tenured track positions. So, since we were not really gaining anything, it made sense. To close the program, the Cancer Institute had come up with a way by which you could pay your own Clinical Associates to moonlight on the campus. Up to now, if you were in the Commissioned Corps it was always said that you could not. However, now they have come up with a way that you can. So, instead of the bright clinicians moonlighting out at "St. Elsewhere", we can pay to have them moonlight on our patients here. We can reward them. The best and the brightest can get the jobs and the extra money and so on. It becomes a badge of honor and you get your best people to do it. We decided that we will have our last class July, 98 to June, 99. From then on we will not have a Clinical Associate program. Those who are coming through in the various other training programs will cover our patients at night.

Klein: Getting back to your time as a Clinical Associate, do you recall any female

Clinical Associates?

Keiser:

No, it was mostly males and it was mostly white males. Actually, I have all of the pictures of each class of Clinical Associates dating back from my class in 1960 up to the present. We had one black physician back in the sixties and then there was a long gap and I forget when the first female arrived. We have had several black physicians and several women since then. Since I have taken over the program we have been pushing to get more women and minorities to participate. I think I have been fairly successful.

Klein:

I was told by several different people that one of the reasons that there were few female participants during the Vietnam War years was because these slots were held for men because females were not eligible for the draft.

Keiser:

I have to tell you I think the reason probably relates to the number of women going through medical school at the time. I went to Northwestern and graduated in 1958. We had four women in a class of 128. In the last 10 years, if you look at a medical school class it will be 50 percent women. I think the eligible pool that you were pulling from in those days was vanishingly small in terms of the number of women. But you may be right, there probably was a bias in that these positions were protected.

Klein:

In my interview with Dr. Kimball he also claimed that "if you wanted to

really get ahead in academic medicine, being a participant in the CA program was a very good thing to have on your CV." Do you agree, why or why not?

Keiser:

I think he was right. If you wanted to get ahead in academic medicine it helped to have gone to an eastern school and it helped to have been picked by your program chairman to be rotated through here. It was definitely a mark in your benefit. I have to say during those first couple of years, as a Midwesterner, I kind of felt I was being looked down upon. I had been to three different centers for my training and I could stand up to those who had been trained in the east. They were not necessarily any better.

Klein:

How do you think participating in the CA program helped your career?

Keiser:

I think there is no doubt; it associated me with an awful lot of bright people. It taught me a lot of good fundamentals of research, both basic and clinical, and it set the tone for my entire career. If I had gone back to Northwestern as Chief Resident, I would have almost certainly gone out into private practice and probably would have made a lot more money in Chicago. But I certainly would not have continued to devote the rest of my life to research.

Klein:

Finally, could you briefly evaluate the CA Program. What do you think this program has to offer its participants, the NIH and the medical community?

Keiser:

You would hope that you would get a lot of people that you could sway

into a career in research. I get a feeling as we select them that we can judge who will go into research and who will not. The number that wants to go into research is relatively small. The number that come through here with the idea of going into practice is much larger. They are foreign physicians. For instance, a lot of Indians, Pakistanis and so on, come here. The INS has been making it tougher and tougher each year to get in here and get training. The foreigners know instinctively that they are not going to be able to compete with the Americans. So they try to get a leg up and level the playing field by applying for the program here and then trying to impress our cardiologists to write them a good letter of recommendation so that when it comes to a cardiology fellowship they will have an equal chance. A number of our best and brightest most recently have gone that way and have been quite successful. Again, very few of them go into research. They almost always do it because they want to stay in this country and go into cardiology.

Klein:

That is alarming to me because if those people do not want to conduct research, what is going to happen to the quality of biomedical research today?

Keiser:

The problem is that coming here is not necessarily viewed anymore as the way to get into research even if you are serious about it. Dr. Varmus has said that there will be a nationwide search for every position. Even if you come here, there is not supposed to be any favoritism shown because you are advertising across the country for who will want to come here to

do the research and then supposedly you take the best and the brightest of those. So a physician who comes from California or Iowa has just as much chance. You get into an interesting catch 22. I went through all sorts of manipulations saying, 'Well, could we restructure the program' and you say 'Well, yes.' The American Board of Internal Medicine actually wanted us to restructure the program and to take the best and the brightest that had been screened by the local medical schools and bring them here. The problem is, no medical school wants to send its best and brightest to Bethesda with the likelihood that they will never come back. There is no way we can insist that they go back. After "they have tasted Paree", how are you going to get them to go back to the farm, to quote an old song. You cannot. We could find no way of having the local medical schools screen and then send us their best. They just won't. I remember a few years ago, I tried to tap the M.D. / Ph.D. program thinking that if you had both you would most likely want to go into research. The interesting thing was that when we sent our ads and information around to these schools we ran into several things happening. One, none of those chiefs wanted the competition, they wanted to keep their M.D. / Ph.Ds. where they were. They would basically tear up our ads and throw them away. They would not even put them on the bulletin board. So we ended up having to send letters announcing our program to every physician who matched to internal medicine programs in the country. We sent out about 8000 letters but it

turned out to be the most successful way because anything you put in otherwise did not get to where it should go.

Klein:

I guess that gets back to my thesis that the draft brought people here.

Keiser:

Well you got hooked early and you stayed. Nowadays, people figure that they will get there training locally and not bother to come here. The other thing is that it is a sign of how successful we have been. We have trained an entire generation of physicians who are now around the country. They have taken their research skills and other things with them and they can give some damn good training where they are. They basically say, 'Why should you bother going to Bethesda? I was there and I can show you everything here. We have a wider patient mix and we can do these things with the grant that I have.' The NIH has been very successful. And that success is necessary because not everybody can stay here. We have to put out 90 percent of the people who join the program, only a small number can actually stay here.

Klein:

Is there anything else you would like to comment on?

Keiser:

Things have changed, during my Clinical Associate years we did not have all of the support that the Clinical Associates have now. In those days you got up in the morning and were responsible for drawing blood for every single one of the patients in the Heart Institute. Now, they have blood drawing teams that do it for them. In the old days, you did not have your breakfast before you drew the blood, and I should say that breakfast was free in those days. The Veterans Administration edict called for sampling

one meal a day to make sure that the food was officially OK. And so, that one free meal came to the Clinical Associate. We enjoyed our time there.

Klein: Thank You for speaking with me.

Keiser: Well, it was an interesting time in history.

End of Interview