HEALTH SCIENCES
Dr. Jack Masur

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PREFACE

This memoir is the result of a tape-recorded interview conducted for the National Institutes of Health by Dr. Harlan Phillips with Dr. Jack Masur on July 11, 1963.

Dr. Masur has read the transcript and has made only minor corrections and emendations. The reader is asked to bear in mind, therefore, that he is reading a transcript of the spoken rather than the written word.

Jack S. Masur, Director, Clinical Center, National Institutes of Health, Bethesda, Md., Tuesday, July 11, 1963

[It appears the conversation began before the recorder was turned on, and that we are joining in the middle of the conversation.]

Masur: I think that you may want to somewhere have a reminder for yourself apropos of your earlier conversation about Dr. [Thomas] Parran's main emphasis upon venereal disease and your words "peddling an idea." One of the Joe Mountin's favorite comments was that the main purpose of a Public Health Service officer in the field was to serve as an "itinerant gossip."

We've talked about the value politically and in fund raising of the categorical approach in terms of giving those people who have a personal, emotional interest in cancer a flag to rally around. Those who have an interest in heart disease support the National Heart Institute. The Arthritis and Metabolic Disease Institute represented a fusion of many categorical interests, just as the Neurological Diseases and Blindness Institute was an administrative, political consolidation of pressure groups in cerebral palsy and multiple sclerosis and other neurological diseases into what is a multi-categorical institute.

You want me to talk about something in the background of the history of the Clinical Center. I don't know whether anybody has told you the story of the move of the Hygienic Laboratories, you know, that were downtown. When [Lewis] Jimmy Thompson was its Director, he got word that Mr. and Mrs. Luke Wilson had offered 90 acres [between 1935-1937, the Wilsons donated 70 acres, not 90] up here in Bethesda to the Sidwell Friend's School. The school chose not to move this far into the country, Jimmy Thompson managed to get the 90 acres of land because of the interest of Mr. and Mrs. Luke Wilson in cancer. As you probably know from other sources, Jimmy Thompson wrangled some WPA [Works Progress Administration] and PWA [Public Works Administration] money to build laboratory buildings, so that the Hygienic Laboratories could move up here. [Note: the NIH was known as the Hygienic Laboratories until 1930; NIH moved to Bethesda in 1937.]

I don't know whether anybody has told you some stories about Dr. Lewis Thompson—"Jimmy" Thompson, as we called him—who really was a pretty good operator. Some of his friends in the

New Deal told him of the availability of residual funds, saying that if he could have the plans in by Thursday, maybe that money could be allocated to the Hygienic Laboratory because the end of the fiscal year was coming. Jimmy merely took plans for building number three and marked them building number four, and pretty soon he had himself another research laboratory building. This represented the beginnings of what turns out to be a pretty damn big empire up here. All of this by way of saying that it is important for some of today's smart young men to remember what they owe to their predecessors.

Also in the background historically, I think it's important to remember the attitude of the Hygienic Laboratory people which they brought along with them to Bethesda. They wanted to do research and were stimulated by findings in the field. However they were loath to get out into the field; they kept fighting off requests for them to do special laboratory tests, for them to go do special studies. It is my impression as a "Johnny Come Lately" in the Public Health Service, from what I've heard, that this was really the origin of the Communicable Disease Center in Atlanta. It was the resistance of the Hygienic Laboratory and then National Institute of Health [NIH was singular until 1948] people to do the applied stuff that Joe Mountin and his people needed to have done in the field that led to the genesis of a Communicable Disease Center idea.

We still face these problems in many ways. Perhaps the most dramatic illustration is the current furor over drugs. The Food and Drug Administration needs so badly to have some high quality scientific work as a background for their regulatory judgment. It seems almost natural on the part of people to turn again to the NIH and say, "With all those bio-chemists, pharmacologists, and clinicians up there, why don't you fellows serve as the research base for these problems in drug work?"

Even though NIH comprises people from entirely different backgrounds who probably aren't aware of the history of the Hygienic Laboratory and the Communicable Disease Center, mostly folks who have come out of the universities, in the face of such a request, they simply say, "We want to do the research that we came here to do. Go away and don't bother us with this applied stuff in drug toxicity."

You get the same story in pesticides. You get the same story in communication—why doesn't the NIH suddenly now devise machines where you can push buttons and get scientist-to-scientist communication, scientist-to-practitioner communication, scientist-to-public communication? We're in the midst of that hullabaloo now. It would seem that everybody puts it in terms of the billion dollar budget now. If we're spending all this money, people ought to get some returns on it. Thus, "Let NIH do it."

Actually it's very interesting to trace this back in terms of the attitudes of research people. We run into this resistance in the universities, too. You know, for example, just as well as I of university people who don't want to engage in the Regionalization of Services Program. Perhaps Chapel Hill is the best illustration. Chapel Hill was started on the premise that it would help the people of North Carolina through regional services. Twelve years ago there was no excuse, no reason for another medical school in North Carolina. When some of us did a survey there we found this was clearly in the record; it was founded to serve in the tradition of the University of North Carolina to radiate its health and medical influence to the boundaries of the state. The medical faculty has been insisting, "To hell with that: We are training doctors here. We're doing research. That's enough for the State."

I cite this as another analogy that this stand-off posture is not a peculiarity of government, not a peculiarity of the Hygienic Laboratory, or the NIH people. It may be more the attitude of the academician. It may be more the attitude of the research guy who says, "Go away and don't bother us. You're interfering with the freedom of research."

Now we have a curious situation here at Bethesda. The only policing, the only control function we exercise at NIH is the activities of the Division of Biological Standards which has to approve the sera, vaccines, and biologicals which are sold in interstate commerce. Here in the midst of this great glamorous research is an outfit which holds crucially important responsibilities. It must compete for very good people who must do service rather than the glamorous research. Obviously, Dr. [Roderick] Murray, who is now in charge, has to permit these people to do some research in order to recruit and retain well-qualified scientists and technicians. We have the same problem in the Clinical Center. If you want a good pathologist, or if you want a competent

clinical pathologist, if you want a well-qualified X-ray man, in order to have a staff which is capable of rendering high quality, well controlled work in the service of the seven institutes' programs of clinical investigation, you have to recognize his desire to do research too. He looks at the other men on the staff of the seven institutes and says, "What has that guy got that I haven't got? Why can't I do some research too?" We have to provide some way for service people to be stimulated by research…to support them with money and space and administrative encouragement for part of their time so they'll stay with us to do the excellent service jobs we require.

We're about to celebrate the 10th anniversary of this Clinical Center. I just want to make one other comment if I may, about what you were saying before you turned the machine on, about some of the people in the Public Health Service who were attracted by Dr. Parran. Dr. Parran, with his great capacity for leadership, was in a sense very fortunate that he was Surgeon General during the period of the Depression.

Well, I think that this is a pertinent comment in terms of our present real bankruptcy in senior manpower for leadership. We're in a desperate situation for manpower. Dr. Parran, coming in as Surgeon General at the height of the Depression, was able to obtain for the Public Health Service some very bright young men, all of whom are now retired, or about to retire. Thus with his capacity to stimulate we had an unusual group of bright people who caught fire with this idea of government service. There were certain young men, Len [Leonard] Scheele, Palmer Dearing, Dean Clarke, Norman Topping, Rod Heller, [Cassius] van Slyke—a whole group of people who began to believe in what Dr. Parran was talking about. They got the idea that one could, within government, accomplish things on a better scale than the individual laying on of hands as a physician. Now, we've just about used up those men. In our desperation for manpower now, we say only semi-facetiously—for all of government, not just talking only of the Public Health Service (PHS)—we need a Depression to bring some more bright young guys in.

I don't know how much of this you want to be autobiographical but let me say that there is a little legend about Dean Clark and myself. When I was just about finished with the building of a new hospital in NYC [New York City], I ran into Dean Clark who was working for the PHS. He

had been selected by Dr. Parran for the Medical Division of the Civil Defense program in World War II. This was a rather remarkable aggregation of people whom Dr. Parran had put together through Dr. George Baehr. The Medical Division of Civil Defense consisted of Scheele, Dearing, [David D.] Rutstein, Van Zile Hyde, Dean Clark, John Alsever, Vic Vogel, [George E.] McCallum, Jeff Thompson, Ben Miller, Marion Randall, Zelda Bryant, et al. I worked for Dean Clark, as Hospital Officer in this OCD [Office of Civil Defense] team. He had recruited me for the PHS in 1943. The story goes that I talked to him about the wonders of the voluntary system, and he talked to me about the satisfactions of serving government. We were both very persuasive, so I stayed in government, and he went to work for the voluntary system in HIP [Health Insurance Plan of New York] and then MGH [Massachusetts General Hospital].

I came in to the Public Health Service on a war time assignment—first in Civil Defense and then in the Civilian Vocational Rehabilitation Program. I left the government at the end of the war in 1946. I didn't want to have anything to do with government and took a temporary job in hospital planning with the Federation of Jewish Philanthropies in New York. In late 1947, Dr. Parran asked to see me. I came to Washington reluctantly, not wanting to work for the damn government. Dr. Parran said that it now appeared that the U.S. Government, through the Public Health Service, was ready to mount a program based fundamentally on the fact that we had an expanding and aging population and not very much research had been done in the chronic diseases. This was quite appealing. Dr. Parran said that it was the greatest thing that had ever happened in his career; this was what he had always looked forward to. It was also attractive because I had been brought up at Montefiore Hospital [in New York], had served with Mary Jarrett on the Committee on Chronic Illness of the Welfare Council. I had been trained by Dr. [Ephraim Michael] Bluestone. I had been exposed to the writings and had had some contacts with Dr. [Ernst Philip] Boas and Dr. [Sigismund Schulz] Goldwater. All these people had been preaching the story of chronic disease; the neglect of the long-term sick and the need for better medical care. Here then was a unique chance to participate in a great government program that would deal with the major causes of death and disability; namely, an integrated, laboratory patient-care facility to implement the government's efforts in research and prevention.

In late 1947, NIH in Bethesda had about 1,000 employees. Its intramural research program was something in the order of $3 million. Its extramural program, about which you've had a great deal of information, was roughly in the order of $3 [million] or $4 million. We are talking now, 1963, and NIH has 9,000 employees instead of the 1,000 in late 1947. The other budget figures you are familiar with, for the extramural program something in the order of magnitude of $800 million, close to a billion dollars; for the intramural program, a program of about $100 million dollars, plus.

I'd like to address my remarks solely to the intramural program, as it relates to patient care; namely, the Clinical Center.

In recalling the early thinking about the Clinical Center—it is important to remember that there were no clinicians at NIH in 1948. These were all administrators and laboratory MDs and PhDs. The ideas which were being pursued involved a series of special hospitals. I think by that time a 300-bed mental hospital had been authorized for NIMH [National Institute of Mental Health]. The NCI [National Cancer Institute] people wanted to have their own cancer hospital. Dr. Parran said that he foresaw quite readily that some people would want a heart hospital. It made no sense to him to build a series of categorical disease specialty hospitals on this reservation. He had pretty much made up his mind that he wanted just one hospital. His advisers said that if they were to add up the interest of the mental health, cancer, heart, plus whatever other categorical institutes that would come to be, you would probably arrive at a hospital of 1,200 beds. That would be a pretty big hospital for research. Dr. Parran asked me about it at our first meeting. You recall that I was determined that I wasn't going to come to work for the government again. Well, within a half an hour the discussion had veered over to Dr. Parran's asking me just when I could report for duty. Well, it was during the course of this conversation that I said that I certainly thought a 1,200-bed hospital was an impossibility. He inquired, "Well, what about a 1,000-bed hospital?"

That was pretty big too, I thought.

"What about an 800-bed hospital?"

I allowed as how that was till too large. Finally, with perhaps a little impatience, Dr. Parran said, "Well, what size hospital do you think is the right size to do research in? What size hospital can a director know what's going on?"

I said that I did not know. To the best of my knowledge at that time the only research hospital was a very small Rockefeller Institute Hospital [in New York]. That size would not begin to satisfy the needs of one [NIH] institute, to say nothing about the needs of several institutes. I added that I had been brought up to believe that the size of a hospital in which one could have some span of management control and have some knowledge of what was going on in the institution was a 500-bed hospital. At this point Dr. Parran banged on the table and said, "Gentlemen, we have a 500-bed hospital."

We are often apt to seek that kind of answer through a project, a grant with a big team, involving surveys with many experts over a period of a year or so. In the course of 15 minutes Dr. Parran decided on the basis of my supposedly expert opinion that 500 beds was a pretty good-sized hospital, suitable for carrying out the programs of the future.

We really had nothing to guide ourselves by. We wouldn't want a place where we would be so big that it would be cold and impersonal, especially in a research institution, an experimental place. Please remember that one of the terms of reference involved having two square feet of laboratory space to one square foot of hospital space. Now, if you take a 500-bed hospital and also provide two square feet of laboratory space, you've got a hell of a big building. Indeed, that's just what it turned out to be. I think that we are far too big as a building. This building of 15 million cubic feet has about 3,400 people in it, about half of whom are concerned with patient care. Another term of reference in the design was our desire for laboratory people to be in proximity to the patient-care people. We wanted the people who were working in the Institute of Mental Health to have some shoulder rubbing relationship, some "cross-fertilization of ideas"—to use some of the old phrases which have become a little hackneyed by now—with the people in the National Heart Institute, for example. We wanted the cancer people to have some shoulder rubbing with the virus people, in other [unreadable] in many disciplines [unreadable] institutes

would be thrown into contact with each other in the elevators, at the luncheon table, at seminars and meetings.

Now this is very hard to prove, but every once in a while, you get some suggestion from a casual comment by the infectious-disease man who says, “Well, I was in the Cancer Institute seminar the other day, and, by God, that fellow had a wonderful idea!”

It’s very hard to prove whether we have actually achieved anything in the way of stimulation by proximity, because you’re really dealing with intellectual compartmentalization. How in the hell do you break those things down!

I have a pet story which is a bit disturbing. An old friend of mine with whom I had worked in 1935, in Holland on a fellowship, was here lecturing one day as a visiting professor from Israel. In the course of his presentation on some work with the rat diaphragm in the metabolism of adrenaline, somebody in the back of the room asked him a question. The lecturer was a little upset and was obviously picking his words carefully. He said to the man who asked him the question, “Well, I don’t know quite how to say this, but three years ago or four years ago, all that work was done in the institute here in Bethesda at the Clinical Center.”

This caused a laugh. It’s a little disconcerting when you think that we have invested probably $30 million in this building on this premise that I talk so glibly about, of cross-fertilization, shoulder-rubbing communication, and then to be in a meeting when a man from the same institute was not familiar with something that had been done on another floor and had to get the answer from a man who came from all the way across the world.

I suppose you can prove this either way. Maybe 10 years is not long enough to think in terms of how much proximity of laboratory people to patient-care people means in terms of communication effect.

Phillips: I was going to say that this is a designed new habit that you’re attempting.

Masur: Well, the expression, I think, is one that I remember Alan Gregg using in another connection in New York when he said that the "research people should be within bare-headed distance of the clinicians"; namely, that a researcher doesn't have to put on his hat and coat to go out to another building on a cold day because that creates a bit of inertia, and he's liable to say, "I'll do it another day."

It's much easier in the same building. I think this is a reasonable approach and one which is gaining some acceptance on the part of universities. Nevertheless, try as I would in one of the great hospitals in New York City which was going to build its research building several blocks away from the hospital, I could not dissuade them. I thought they ought to pay attention to the fact that we invested $30 million here on the principle of proximity. They now recognize quite readily that it wasn't very smart to put their research building three blocks away from the patient-care area. Well, what I'm trying to say is that this principle of patient-laboratory design is being accepted more and more as something useful.

Let me tell you a couple of little tales with regard to the design and construction phase of this building. The one that always gets a chuckle, but which I'm afraid is terribly true, illustrates the point that research is so glamorous that you can get an awful lot of things approved, including money, which you can't get for patient care, or for service. One of the good illustrations is that in 1948, government policy on the part of the Bureau of the Budget was that you could get air conditioning only for operating rooms, for a nursery, or for a highly specialized laboratory maybe. The line of argument which we took was that we had some strains of mice which we used in cancer research which were highly inbred and were terribly sensitive to temperature changes. It was not unusual for a man to come in on an August morning and find that a colony of these mice had been wiped out the night before in one of our older buildings because of the heat and humidity. Ergo, we had to have air conditioning for our Clinical Center with more than 1,000 laboratories. This was a very cogent argument which enabled us to get a building of 1,250,000 square feet, about 15,000,000 cubic feet, completely air conditioned, one of the largest air conditioned buildings in the world. Fortunately, this air conditioning is also good for our patients, also good for our employees. It contributes to the efficiency of the work and the care of our instruments and everything else, but I'm not so sure that we would have gotten to first base

with air conditioning if we had put it on the basis of employee efficiency or patient comfort. It was very effective to talk about in terms of the peril to our precious mice.

Another amusing detail, which isn't particularly significant, is the severe criticism we got over our very large lobby. I happen to believe that an imposing lobby is important, particularly in a place like this which is a symbol of status for the United States Government. We were damned because we "wasted money on such a large lobby." We began presenting the design in terms of the fact that the only major resources for mass casualties in the event of a bomb, or a severe catastrophe, the only places between Richmond and Baltimore were the National Naval Medical Center and the Clinical Center. Therefore, we had to have a very large lobby for triage, for the classification of mass casualties. The new response was, "Oh, it's too small." When we talked in terms of aesthetic consideration, status considerations, the lobby used to be too large.

I'm not going to take the time to tell you of our difficulties. Remember I said that there were no clinicians here, so that in a sense designing and constructing this building was a lot easier. We didn't have to confront clinicians who had the usual nostalgic insistence upon design as they remembered, or as they thought they remembered it in the place they came from. I remember one donnybrook when the psychiatrists wanted to run off to a separate part of the building. They didn't want to have patients in the head house. That one was settled very quickly after a few words to Dr. Parran: "Next subject on the agenda, please."

I could say to you facetiously that, admittedly, this place was extravagantly designed in the allocation of space. The fact is that in the light of our history of 10 years, our most crucial problem here is space. Friendships are being lost in the struggle over one room, mind you, this is how tough space is. One could work on the thesis that the most extravagant planning in the universe of research, which is expanding so rapidly, the most luxurious planning is within a short time the most efficient planning.

I don't know what we would have done here had we not planned really lavishly. We are no longer lavish, and you can go around here and see evidence of very intense crowding. We worked on an arbitrary allocation of the number of beds and the number of laboratories to the

National Heart Institute, the National Cancer Institute, the National Institute of Mental Health, etc. At that time we didn't have an Institute of Neurological Diseases. The total number of beds and the large number of laboratories were based on the assumption that one of the main reasons for having a place as large as this was that if we got a real breakthrough in a research discovery, we could then reallocate beds and laboratories to pursue this breakthrough as vigorously as you could with highly standardized, truly comparative clinical tests of the findings. I think that concept is a very good one. In a way we've been fortunate. The Lord hasn't given us any great breakthrough because we have not yet had to crack heads and hold the buckets for blood that are going to flow the day we try to move a few beds and a few laboratories from one institute to another. It can be done, of course, but ten years later this could be a very rugged deal.

This is illustrated by the new Institute for Child Health and Human Development, which was originally thought of as an institute for extramural grants to support activities in the universities. Now that it has come into being, they are planning, they are looking for some beds, and they are looking for some laboratories, and all of the original settlers, the early squatters will have no part of this. Interestingly enough this new Institute for Child Health and Human Development is the first institute which begins to cut in quite different way from the categorical approach. The categorical institutes say we wish to study—for example, arthritis—in infants, small children, middle-aged, and old people. Therefore they claim they must move across the whole age span on a strictly disease categorical basis. The Child Health and Human Development people take a different approach. I don't know how we are going to resolve this reallocation. I don't even know whether we can fit them in.

Now let me just say one final thing to you, that some of us feel strongly about. One of the reasons for some of us being content to work here is that we think that we have a unique opportunity to prove that government can do a job at the highest level of excellence. We have very generous support, even though our salary situation at the present time is almost untenable. I think we can come back to that, but in general, we have had wonderful support. What we have sought to do during these 10 years, and I hope have achieved in some degree, is to show that, given a chance government people can do biomedical research and patient care on a high level of excellence. I would like to think that in one decade this hospital has taken its place along side of

some of the great university hospitals which have been in business 50 years, or 100 years. In terms of the quality of the laboratory and clinical investigations, in terms of the prestige, in terms of the quality of care of the patients, I would like to think that we have come now to the point where our government has acquired more respect as a result of some of the things being done here at the Clinical Center.

Phillips: What has been the effect of the Clinical Center on the purists—let's say, the heart researcher. Take any man who thinks he works in a vacuum. Has the Clinical Center broadened his attitude?

Masur: When we set out to develop—let us talk in terms of this building, although it really means the program, but I'd like to exemplify it by this building—we said that we would like to attract from the universities the best qualified people. By special language in the appropriations act we were then able to get a little more money for salaries than what most government [unreadable] of $19,000. But what we really had to offer was something new, something exciting, the very best physical facilities in terms of buildings, in terms of equipment—to be able to lure people to a new environment on that basis. Secondly, we said to the scientists and the clinicians we would attempt to back them up with enough administrative help so that we could reduce the burden of paperwork. Thirdly, we said that they would have no teaching responsibilities and, there, they could concentrate most of their time for research. They wouldn't always be fussing with somebody—that there would be plenty of budget money—about how to get a piece of equipment. They wouldn't have to be preoccupied with teaching obligations to classes of students. Thus, we ended up with a situation where the research man had the vast majority of his time to do research. This results in a very intense life. This is a pretty hot light. Whether the other digressions, where a man has to go and teach, or where he has to spend his time on administration, represents rest periods, or whether they represent convenient excuses for not having gotten so much done, is a debatable point. The fact remains that this intense life of research can get awful damn uncomfortable when you have none of the conventional reasons that people have in other place for saying, "Well, I haven't got anything done because I got bogged down trying to get this piece of equipment," or "I had too damn much administrative work to

do," or "I had too much teaching," etc. At NIH, the researcher has had most of his time to do research.

Now we've heard time and again from some of our staff that we ought to be doing "teaching." We have a wonderful opportunity here for graduate students particularly. This gets us into some very involved questions as to the role of government in degree granting, or how much time our men will spend in teaching. In talking about this problem with some of our more thoughtful people, the question arises whether we have come too quickly to a point where you turn this high pressure on a man to produce ("publish or perish") where he has none of the usual reasons for not producing in terms of the consumption of his time and other obligations. I think this is a nice question to ponder. Turn that machine off.

Phillips: What association, if any, did you have when you came into the Public Health Service with Dr. [Joseph W.] Mountin?

Masur: I had very little contact with Dr. Mountin. As a hospital person maybe I'm emotionally biased. The way I express it is that I almost literally don't understand the public healthniks. I don't understand what they're talking about. I find that if I read the 1948 Lowell Lecture Series, for example, they talk about the "obligations to society." Now, in the 1963 Lowell Lecture Series, they're all saying the same thing, except that they are not saying "society." They say, "the community." [The Lowell Lecture Series are free public lectures that have been sponsored by the Lowell Institute in Boston since 1836.]

Dr. Mountin was certainly one of the most down-to-earth of this group of people. Somehow or other the hospital character, the superintendent, who is concerned with the care of sick people, with meeting the payroll, with the employment of enough nurses, often finds the "public healthers" giving out with too many broad generalizations. We have this bias that these guys just never met a payroll. They're talking in terms of general principles, and we have to deal with operating details. I think this may account for some of the schism between the hospital world and the public health world. I had, therefore, officially, very little relationship with Dr. Mountin's

group. [Mountin was the founding director of the CDC, Centers for Disease Control and Prevention].

My limited contact with Mountin was later when I was chief of the Bureau of Medical Services and Mountin was chief of the Bureau of State Services. One of the things I recall was that Dr. Mountin, having come up the hard way in terms of earning stripes for promotion in the [Public Health] Service, was faced with the inflationary situation of recruiting people where we had to continuously to upgrade jobs to temporary higher grades. One day he got so exasperated that he shoved his papers away and said, "Let's make them all four stripers [Captains]! We're just engaging in some little exercises here, and we're really not telling the truth with regard to the job."

This is the same kind of criticism which you get in Civil Service, or in any highly structured personnel situation. Our personnel people have to write up a job for a one grade promotion for which industry would pay 10 times as much. In other words, we prostitute the job sheet in order to get a grade promotion, and so often the job sheet has nothing to do with the facts of life. This bothered a fellow who was as honest as Joe Mountin. We had to keep on raising the commissioned officers' grades all the time. Well, we're still in that same dilemma of trying to recruit people because the universities are now re-recruiting back some of the people we took as young men. They offer them positions as chairman of departments, with salaries of $30,000 and $35,000, where our top salary is $19,000. One interesting phenomenon is that two of our senior men who went off to be professors have now returned to us. We find this very interesting. I don't know what the details are in each case. It's hard to tell whether a man really recognizes his reason for leaving, or in fact, his reasons for coming back.

One of the interesting syndromes, I think, in this day when money is so easy to come by for a qualified researcher, is the picture of the bright young man who comes here, and spends let us say, five years planning a program. Then when the time comes to produce, he is offered a job at almost twice the salary at a university which can now, if it properly plans a program, get very large grants running into the millions of dollars from NIH and the foundations. I could name a few people for you, which I choose not to do, who make a career out of moving from one chair

to another chair in planning programs for four and five years which NIH supports, or which a foundation supports. One can therefore be a "planning gypsy." You can go from one planning job to another. All you need is three successive positions for a career in planning, without ever producing a damn thing.

Mountin was one of the great, great men of the Public Health Service, an unaffected fellow, very thoughtful, who really in some ways was quite the opposite of Dr. Parran in terms of being able to earn the affection, the admiration of younger men who would come and stay in the Public Health Service. Mountin was a hard taskmaster in that sense. Now certainly there were people who stayed with him who were highly competent, who were tremendously loyal because they recognized his integrity. They recognized his thoughtfulness, and they recognized his vision, but quantitatively he doesn't begin to compare in his recruiting capacity with a Parran. This was, I think, probably a personality question.

[The next page of the interview is missing. It picks up in mid-sentence with Masur speaking about how assignments to Marine Hospitals in the Public Health Service were made in the past.]

…only talk in the medical-care area, the hospital area. Throughout most of our history we did not have particularly good hospitals, they were mediocre. They rarely had specialists trained for particular functions. A man had the figurative sword placed on his shoulder, and someone said, "You will be placed in charge of the nose-and-throat service in Savannah beginning next week," or "You will be the cardiologist in Baltimore." The truth of the matter is that most of these men had not had particularly good clinical training. It was in the middle 1940s when R. C. [Ralph Chester] Williams was chief of the Bureau of Medical Services and Otis Anderson was put in charge of the Division of Hospitals that we began to send men away for special training so that they could develop specialty careers in the Marine Hospitals, as they were then called. I think one can trace a sharp improvement in the quality of medical care in the Public Health Service hospitals from that period.

Within a very few years, Dr. R. C. Williams retired. By the time I took his place as chief of the Bureau of Medical Services, we had developed a system of hospitals in which we had very much

better medical care as a result of Otis Anderson's work. But then we ran into the situation where we didn't have the patient-care load any more. The whole merchant marine had declined, and we were in fact, renting as many as 1,000 beds per day to the Veteran's Administration, which didn't have adequate facilities. The result was that in the period around 1951, 1952, 1953, our patient load fell off. I needn't describe all the conditions—one being, for example, the large venereal disease case load which we used to have among merchant seamen which dropped off very sharply for obvious reasons [the development of antibiotics]. Far more unfortunately, the day came when the Bureau of the Budget said to the Veteran's Administration, "You will no longer rent beds. You'll live with your own facilities." Suddenly the Public Health Service was confronted with the fact that it had in its system 1,000 beds which couldn't be rented and for which they had no patients. This resulted in the closing of about ten hospitals. Closing them was an emotional blow to the old line officers. It's not a very happy morale situation for recruitment, but if you don't have patients, you've got no grounds for continuing. It was at this period that the Bureau of the Budge again and again returned to the question: "Why do you have Marine Hospitals?"

Well, you can make all the arguments about the fact that "merchant seamen are special wards of the federal government" as illustrated by how they're handled in federal courts, that these people have no residences, that they're not entitled to care from the local authorities, if they're indigent—that doesn't stand up too well because a great many of them indeed have residences now. Then you come to the argument, "Well, the Marine Hospitals have always been the ground for recruitment of people for the Public Health Service."

Even your best friends will say, "That's a mighty expensive recruitment device, how many men have you recruited for the Public Health Service through the clinical route?"

You look around to find, for example, good hospital administrators for your Marine Hospital system among the officers on active duty in various branches of the Public Health Service. I was appalled, as I remember, to look at what I thought were some of the brighter public health people, saying, "Now, why can't we recruit this fellow into the hospital system? Why can't we make him a medical care administrator?" [And] to find to my utter astonishment that some of our

public health people had never had an internship. They had been recruited directly after medical school graduation into the Public Health Service and were doing well. Maybe this is part of the reason why I said before that sometimes I find that I don't talk the same language with the community health people, with what seem to me rather broad generalizations in relationship to a practicing doctor. Well, so much for that.

Phillips: As you see it, has one effect of the research grants program and its contribution to the university research complex made the university and its medical affiliates a locus for talent in the Public Health Service?

Masur: When you say Public Health Service, do you mean the Clinical Center?

Phillips: I would assume that the Clinical Center is a kind of beacon.

Masur: I think you have to take into account the fact that from the very beginning and almost without argument, which in a bureaucratic way is astonishing, the Clinical Center has had nothing to do with other hospitals in the Public Health Service organizationally, and, indeed, professionally. True, some of the Public Health Service commissioned officers—like Luther Terry,]F. Edward] Hébert, [Theodore F.] Hilbish, Miss [Ruth L.] Johnson, Miss [Edith] Jones—and I could go on and give some others, came out of the Public Health Service system of Marine Hospitals to work in the Clinical Center. They've done very well. But here for example, we have not done much to exercise what is really the fundamental reason for the Commissioned Corps; namely, mobility—in order to staff a lot of institutions and a lot of places, some of which may be undesirable jobs professionally and geographically. At NIH we have not exercised mobility. We've not moved men in and out very much on that basis. We use commissioned officers alongside of civil service people but about the only time we exercise mobility is on the rare occasions when a dietician, or a nurse, doesn't turn out to be satisfactory. Then the commissioned officer system is an excellent administrative device to say, "Sorry, we have no use for this person. Would you mind transferring him elsewhere?"

It's hard to make a case for the Commissioned Corps system at NIH because we don't move people; whereas in the Division of Hospitals it's almost routine to move men—usually every four years. There are exceptions to that, but this place has never been a part of the PHS hospital system—either organizationally, or even spiritually. I doubt very much whether there are many of our people on the staff, ex-university people, who know anything about the Public Health Service hospitals. It is really set apart from the rest of the medical care organization of the Public Health Service.

Phillips: Do you find—I don't know whether you make tours around to various universities and their medical facilities—but if you do, do you find an effort there to make for this juxtaposition of the researcher and clinician?

Masur: Yes, but this has been brought into being a lot more clearly during the past two or three years since the "clinical research units" of the extramural program were formulated as a concept and supported very generously by grants. I don't know how many universities now have "clinical centerettes"—40 or 50. These are 10, 15, 20, 25 bed units which represent miniature Clinical Centers, and in fact, some of them are called "Clinical Centers," so that I think you have this growth.

Now, I don't want to get into the question that disturbs so many of my friends. I have a good deal of contact in university hospitals on a pre-Public Health Service friendship basis and on the basis of an occasional survey, such as the University of Alabama, or the University of North Carolina, and on continuing contacts with Russell Nelson at Hopkins, and Al Snoke at Yale, and other people at various university hospitals. I hear a great deal from them about their anxiety with respect to the enormous amount of money pouring into the medical schools and hospitals for the support of research which factually, if you want to call the rose by the true name, is in many ways an indirect support of the medical school. If you cut off this money tomorrow, I doubt if many medical schools could survive. The impact of so much research money is not only to reduce the time and attention given to teaching, but in the circle in which I travel, the university hospital administrators are very much worried, quite anxious, about the impact on service in the care of patients, on the teaching on the wards and the house staff problems. The usual expression

which you hear over and over again is that "the pendulum has swung too far toward research." This is a very hard thing to prove in terms of the number of men who are doing so-called full-time research. You know, we talked about "full-time" [and] "full, full-time", and now we talk about "full, full, full-time." In the university hospitals, my colleagues, my friends, are very much worried about what this so-called "easy money" is doing to the service aspects of the care of patients.

Phillips: It would appear that whatever the circumstances were that made for the change and the ease of money, it doesn't seem manageable in human terms, but out-of-balance.

Masur: For one thing—you see, an old hard-nosed administrator who has run a hospital and has found a dollar not too easy to come by, gets a bit overwhelmed by the amounts of money which are being given. I have had at least two of my friends who are the directors of university hospitals, who have served on study sections, or on councils, come to me very upset and say, "Jack, I sat through an hour's discussion today with five minutes given to one case and 15 minutes given another case involving a half a million dollars. There must have been a tremendous amount of work going on before, but to see money passed out that quicky on that amount of paper is just incomprehensible to me."

This may not be entirely valid, but this is the reaction of a man fresh and new watching millions of dollars being distributed and perhaps not really knowing who the investigators are who are being awarded these amounts who were known to others. We just are dealing with a different order of magnitude in dollars and with a different order of magnitude of difficulty in getting the money. The amount of time that a hospital administrator will spend with a rich old lady to get $50,000 out of her over a period of a year or two, or the effort he will go to get $100,000 in a two-year project out of a foundation as compared with his sitting and looking through several pieces of paper and hearing of a site visit and then see a half a million dollars granted, which is going to be renewed for the next five years—this is a little hard for him to get used to. I don't imply any criticism as to whether this is correct or not, but it's just almost—well, maybe you could say that the hospital people, what I choose to call the hard-nosed administrators, are like the small corner-grocery store keeper here in Washington who is not able to understand the

operation of a giant super market, for instance. These are the sizes of the things we're talking about.

One of my colleagues came up to Bethesda to NIH from downtown. I said, "How do you like it up here?"

He said, "It's very easy to get used to this fiscal sunshine."

Occasionally we would ruminate about when the day of reckoning was going to come. That day when—to use his expression—"Santa Claus" finally is called to account as to how some of the money is being spent. There's going to be hell to pay some day because not everybody in the world is honest. You can't depend upon the integrity of people to promote research in the purists' sense by giving them large sums of money without enough accountability.

This sounds like an "I told you so" story. My own feeling is that we haven't begun to feel the brunt of this highly permissive dispensation of monies for research. [James] Shannon [the NIH director] is now caught between the Congressman [Lawrence H.] Fountain approach that says, "These are tax funds, and I demand that you set up conditions under which they are properly spent" and the attitudes of the university researcher grantees. The moment Shannon turns the wheel just an inch or so to tighten up, you begin to get the screams of "You are interfering with the freedom of research!"

I think this is the beginning of a lot of trouble.

Phillips: Does the Clinical Center here operate under an advisory council?

Masur: No. The intramural programs are the institute's responsibility. Mind you, the major activity of an institute director is the extramural program, as it must be with Shannon himself. It's eight dollars of extramural budget to one dollar of intramural budget. I won't try to size the political ramifications of the eight dollars of extramural grants. It isn't just dollars. It isn't just $800 million to $100 million. There are political factors involved there, so that the institute

director is not likely to concern himself much with the intramural, either laboratory or patient care activities. He has a scientific director, an associate director in charge of scientific research who is usually a laboratory man, who is the right arm of the institute director on the intramural side. The scientific director, in turn, has a clinical director who is the equivalent of the of the physician-in-chief on the patient care side of each institute. Incidentally, this leads to lamentations on the part of the clinicians that they are put upon because their immediate boss, (namely, the deputy of the institute director who is usually a laboratory man) dispenses his favors of budget and space to the pure scientists, the basic science people, rather than to the clinicians. The clinicians claim the scientific director looks down his nose at clinical investigation as an inexact kind of science. We've had people like [Hans] Stetten with no real respect for clinicians, who represented the epitome of this. Stetten has gone on to be, curiously enough, the dean of the new medical school in New Jersey at Rutgers. So far as he was concerned you could have moved every patient out of here and converted every one of these rooms into a bio-chemistry lab, and in his view, we would have achieved the kingdom of heaven that much faster.

On the other hand, there are scientific directors who are more balanced than he was and who recognize that our mission here is to try to integrate the laboratory and the clinical investigation activities.

Well, this gets to be organizationally a fantastic conglomeration. Take my own situation here as director of what is really a "hospital for experimental medicine" with seven faculties. In our search for a name for this place, we didn't want to use that expression "experimental medicine". We didn't want to use "clinical investigation". Dr. [Rolla] Dyer [NIH director] once said that he would fire the first man on the staff that he heard who used the expression "human guinea pigs." We finally arrived at the title "Clinical Center" which says exactly nothing—which was the virtue of that particular name to go along with some observations on my own role as superintendent of the hospital. I like that old-fashioned term because it stands for a highly negativistic son-of-a-bitch who insists on discipline and authority and, in a research environment, you need that kind of person. I deal three mornings week as an associate director of NIH on Shannon's immediate staff in Building Number One. Secondly, I participate in the meetings of the institute directors. I sit in the regular meetings of the scientific directors which Bo [G.

Burroughs] Mider as director of Laboratories and Clinics presides over. I serve as chairman of the clinical director's meeting. You recall these are the physicians-in-chief for each institute. We also have a medical board responsible for medical care policies and standards. We have a surgical administrative committee because we have three surgical services, each with a separate chief. We have various other committees such as the Radiation Committee, the Committee on Infections, the Committee on Normal Volunteers, etc. Now, we have not yet developed anybody who could successfully explain the pattern of organization of NIH. This is an incredibly complicated set-up, but this is the price you pay for the categorical approach. Shannon's problem is to what degree can he ride herd on the individual institutes. We have a set of policies which they are supposed to adhere to, but this place has grown awful fast. The political gamesmanship that the Congress has engaged in, in trying to prove who wanted to cure cancer faster by appropriating that many more hundreds of millions of dollars, has hardly allowed us time to come to grips with some of our organizational problems. The miracle is that we continue to find a modus vivendi on the extramural side and on the intramural side.

I won't go into some of the questions which are involved even in this single building, an attitude, or a discipline for laboratory workers as compared to the discipline which we must have right across the threshold on the patient-care side—such are rules in the hospital, such as the penalties for being late, the penalties for drinking alcohol, the penalties for not coming to work on a day when it snows. We've got an entirely different order of discipline on the patient-care side from right across the threshold. This is perhaps not pertinent to what you are seeking.

Phillips: Save that it illustrates the complexities attendant upon growth and as to which certainly at the moment there is no ready answer.

Masur: Except that it is working.

Phillips: That's what I meant by whether it was manageable.

Masur: I think that a person coming, for example, to be the director of this hospital really ought not to be too young because 10, or 12, or 14 years ago I would have had much greater difficulty

in living with this "freedom of research" cry. Around here you don't issue an administrative directive. It's far more effective to talk about these things, to try to get the medical board to establish a policy rather than to push something which is quite obvious and issue an administrative directive on it. Perhaps what I'm trying to imply is the need for a greater degree of administrative maturity and less striving on the part of the director for authority. Overt manifestation of authority by the administrator in this kind of environment is even worse, I think, than in the university, such as the difficulties which a dean has with his faculty. We have, here, in effect, if you look at it in that light, a hospital with seven medical faculties with all that that means, and that gets to be pretty rough administratively.

Don't you think you have enough now? [The machine was turned off, and then turned on again briefly.]

Masur: In talking about the origin of the Clinical Center and the development of the physical facilities to mount this great intramural program, Dr. Dyer was keenly aware that there were people in the National Academy of Sciences, the Medical Research Council, people like Perry Pepper, [Alfred Newton] Richards, and others, who were opposed, violently opposed, to the Public Health Service developing this program in Bethesda. Dr. Dyer had a very keen understanding of this and handled, I think, the situation very well—he and Dr. Parran and others. It's very hard to name specific people, but I recall hearing that when we started out with an appropriation request of $40 million for these facilities up here (which later grew to be $60 million) there were those who were opposed to it, who said, "Rather than to set up this government monstrosity where you never will be able to recruit people to come and do research under the red tape of government—you've never been able to do it well, certainly in the bio-medical sciences—what you ought to do is to take this $60 million and give $1 million to each of the medical schools, and they will do a better job at this."

We managed to get by that kind of resistance and opposition. However only recently, within the last year, I met a dean of a medical school in this county who is now retiring, who said to me with a curled lip, "Jack, you know, this place [the NIH Clinical Center] never should have been built in the first place!"

We've not entirely overcome that, but certainly the resistance in the medical school people to the contrary has melted away in view of the fact that they have gotten not the million dollars that they were lusting for originally, but many, many times that since. They're now getting a couple of million dollars a piece each year so that their envy, their resistance in principle and certainly in practice to the concept of a large government research program here in Bethesda has largely disappeared. Historically it's important to remember that this building didn't come very easily, and there were people in the highest levels of the National Academy of Sciences who were bitterly opposed. We're here and they know we're not going away.