

Note:

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Some examples of the kinds of errors to be found in the transcripts are provided below.

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jmf_int_transcript_Williams_2_2_1976.pdf	20	“Parkalnd”
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UTHSC Interviews: Dr. Foster

AH: Tell about the MD show and how you got involved in the MD show.

Well channel 13 was interested several years ago in doing a local production, and they thought that the medical school was one of the best kept secrets in Dallas so as a consequence they thought that an ideal local production would involve a television program emphasizing medicine and the medical school. They approached Dr. Sprague about this I understand and he was enthusiastic. The way I got involved was that I had previously served on the school board in Dallas and in that role had been seen by 13 people on Newsroom and other television programs and they thought it was barely possible that despite my amateurish status that I might be able to appear on such a program. So they ask me, I wasn't very enthusiastic, but Dr. Sprague was enthusiastic so I did it. ~~And~~ And that was how we got started. We've done four seasons locally, all of them with guests from this campus. But the ratings of the program have been very good for public broadcasting and the people are interested in medicine, the guests have all been excellent and as a ~~consequence~~ consequence they wanted to get into the national producing business and they thought that this would be their first ~~big~~ venture. So as a first step they're going through the Southeastern US on the Public Broadcasting System and ~~they~~ they've also submitted it for the possibility of national distribution but I really don't know about that.

So we'll be on somewhere between 100 and 120 stations starting in ~~January~~ January. I also have guests from outside this campus for the first time. But still the bulk of the guests will be from this medical school.

AH: Why have you thought it has been important enough to give so much of your time. ?

Well, I try to do this largely outside the regular hours of ... the school does take time and ... but all of us are involved in things that we think are important to the local or the national community, and many of us serve on national scientific committees that take an enormous amount of ~~the~~ time. I'm an editor of two scientific journals which takes an enormous amount of time but I think that this program is worth doing, I might say parenthetically that I don't like tv, I mean I really don't like to be on it, but I think it's worth doing, both because it helps us from a PR standpoint to be known in the community. It's a tremendous resource that the community, both the physicians and the public need to know about. That's a prime reason. The second thing is that I feel pretty strongly that it's meeting a need that the public has to learn more about medicine. Doctors are so busy that they don't have time to sit down and talk with their ~~many~~ patients about their illness, and since we talk about the major medical illnesses it's an opportunity for people ~~xxx~~ who have these diseases and their families ~~xxx~~ to find out about things, up to date, modern and ~~in lay language~~ and scientific but in lay language which they simply don't have time to learn for the physician. Not that he doesn't want to teach them, but he is simply so involved in taking care of the critical issues that he can't spend 30 minutes to talk in detail about such and illness. Now, it's not only the lay public which has responded, we know this because of the letters and the phone calls that we get, but many doctors in small communities watch, in North Texas, watch the program, thus even though it's aimed at a lay audience, the ~~facts~~ facts are up to date, and doctors tell me that they learn things that they didn't know in the field or are so busy that they haven't caught up to these things. So we always, I always consider the university to be, to have two functions, it is as Dr. Seldin has often and eloquently said it exists as a community of scholars to achieve new information and research, but in addition to that it performs a service to the public and the community in which it finds itself, and from which it draws its support. This is our feedback back into the community... we I think upgrade medical standards by teaching, post graduate ~~xx~~ courses and a number of other things, and I consider MD to be simply one more aspect of our contribution back into the community ~~which~~ which supports us



us by its tax dollars. So I do it not because I like television, as I said I don't, but because I believe this is part of the obligation the university has to its constituency.

?What kind of feedback do you get from Dr. Sprague?

I ~~do~~ don't know. I guess he likes it. In fact he talked to me about being on a program. I want to have him on the program one of these thins. I think he's very pleased. We've had a ..it's just that people are interested in medicine and the guests have been outstanding, but we've really had a very surprizing response to the program. I would say he's pleased. How do you decide on a particular topic?

Well, I might do that in two ways. I might have somebody that I think I would like to , that I know has done something new, for example when Dr. Bonte and Willerson, and their colleagues, Dr. Parke, were developing the myocardial imaging, ~~xx~~ in other words a way of looking at where a heart attack had occurred, we presented that on MD before it had ever been presented at a scientific ~~xxxx~~ meeting, in other words I ~~xxxx~~ knew that this was a new technique, that people would have wide interests so I decided to do that because of the ... something ~~that~~ that I knew was on. ~~Something~~ Sometimes its because I think somebody is very articulate and warm and I think people would like to get to know the doctors as a person by seeing them. But most of the time it's by choosing the major diseases of ~~xxxx~~ man, about which there are a lot of misconceptions and myths, and we that we would like to teach the public about. So if you look over the 52 or so programs that we've done so far, you'll ~~xxxx~~ find that these are by and large the common problems that we've always talked about. All the major killers of western man. Occassionaly we'll throw in something on research and a rare disease but by and large they're the common things that afflict the most patients.

?Your guests have up till now come from UTHSC?

Yes one of my condidtions for doing the program to start off was that I would have no one on who was not a full time academic ~~physician~~ physician. The reason for that was very practical, if I've got 200 surgeons in ~~xxx~~ private practice in town and I choose one of them to be on the program then immediately there's a the problem of jealousy etc, etc. We're not in ~~xxx~~ competition we only see patinets in consultation with other doctors, we as a consequence can't be accused of any subliminal advertising. or anything of that sort. So all my guests have been full time academicians. Another reaseon for that is that they would be the ~~xxx~~ people who would be in the forefront of medical knowledge as well and they are by profession teachers so they ought to be , they ought to be good. But that's the reason for the academicians, and because we were largely going in solely in the North Texas area in the original four ~~seasons~~ seasons, it seemed natural to have all the guests from here. Costs a lot of money to bring people in from out of town. We're doing that on the new series.

of course that's very expensive because we take our film crew to the city of origin to film the physician in situ there and then we fly them down here to actually tape the program so .... Cecil and Ida Green of course expanded their support of the program very extensively to allow this to happen so...

?Curriculum?

I would say this that I think (I represent) a very large majority of the faculty who is very ~~xxx~~ much in favor of maintaining this institution as an old fashioned American medical school. As you probably know there's a trememdous pressure, has been over the last few years, to ~~dismantle~~ dismantle the model of medical education that made American medicin the greatest in the world. Dr. Seldin ~~xx~~ has spoken about ~~this~~ nationally and on many occassions and he'd be the one to talk to about it but basically what he will tell you is that following the Flexner Report, which was a study of these sort of fly by night , there were hundreds of fly by night meidcal schools, a model was established which consisted of two of basic and rigorous training in the basic sciences, followed by two years of training in the clinical ~~sciences~~ sciences.

Bonte  
HEART

Traditional

FLEXNER

YEARS



Before the MD degree was awarded. There's sort of an anti-intellectual climate going on in medicine and the country as a whole and many medical schools have abandoned that model. I've been in many of them because I've been in national ~~positions~~ positions which required me to visit other medical schools. The idea of the need for basic science training has in many schools been dissipated. The idea that one can shorten medical training, that one does not have to be rigorous is very, is very prevalent today. And I think that's a tragic mistake because it's only in ~~the~~ the last couple of ~~decades~~ ~~xxx~~ decades that medicine has become a semi-science really. ~~Maybe before that too. We had powerful drugs~~ Maybe four decades. Where we have powerful drugs, where we can do things. I mean you know really it's the golden age, and all that's based on hard science. And most of the great advances have been made in basic science laboratories and not in the applied or clinical science laboratory. And so to ~~dismantle~~ dismantle this machinery means two things. One that new advances won't come, in other words the solution to cancer won't come out of testing a bunch of drugs that will kill it, it's going to be somebody who's working with genes, you know and finds out how to modulate them. Just like a microbiologists discovered penicillin you know that's the way it going to happen. But if you don't have basic science departments there's no place for basic ~~scientists~~ ~~scientists~~ ~~scientists~~ scientists to work and medical schools is where they work by and large. There are a few research institutes. but the great basic ~~scientists~~ ~~scientists~~ ~~scientists~~ scientists work in medical schools. And if you don't have jobs for them where ~~there's no teaching medicine~~ they teach in medical schools that's one bad thing. But the second thing which I think most people don't realize, you could argue that you ought to have basic divisions even if they didn't teach just to accomplish these things I think, but more important from my standpoint is the clinicians, somebody who takes care of sick people. There's the recognition that you can't understand any modern disease until you understand it biochemically. It's not just in the journal of clinical investigation that one finds sophisticated biochemistry, you read the journal of the AMA or the New England journal of Medicine or the American journal of surgery, which is what the practitioner's reading, and modern diseases are described in biochemical terms. I mean sickle cell anemia is a disease in ~~which~~ which the hemoglobin has one amino acid substitution. Now if a student has never learned what an enzyme is or what an amino acid is or what a substitution does to the oxygen dissociation ~~curve~~ curve he can't even read the literature. So he's programmed to be obsolescent about a year after he's out of medical school if he's not trained in the basic sciences. You see. I don't care that he knows all the sophisticated chimerics of an enzyme like the biochemists know, or that he understands the details of molecular biology like the microbiologists know, but he has to know the terminology and the vocabulary so he can keep up to date you see. Heart ~~xxx~~ attacks are not going to be understood by somebody who doesn't know how cholesterol gets deposited in a blood vessel. So, I like the kind of medical school we have because we have held to the model of rigorous training in basic science. our students are known through out the state and elsewhere as being superb clinicians, that is they come out of medical school and they're ~~xxx~~ ~~equipped~~ ~~to~~ ~~take~~ ~~care~~ ~~of~~ ~~sick~~ ~~people~~. And this is in a very academic ~~xxx~~ ~~environment~~ ~~usually~~ ~~these~~ ~~two~~ ~~things~~ ~~don't~~ ~~go~~ ~~together~~ ~~xxx~~ they're quick to learn how to take care of sick people, and this is in a very academic environment. See usually those two things don't go together, you have a high academic environment where people are publishing papers which are in the best journals and so forth, and usually, many times at ~~least~~ ~~xxx~~ least, those schools are weak clinically because ~~ideal~~ ~~develops~~ ~~that~~

Goldstein  
(indicated)



the idea develops that you have a research faculty and you have a clinical faculty and those ~~two~~ two things are distinct, but what has merged here is the idea that the clinician and the investigator are the same person. So that he is involved in both aspects of these... We think it's very important that a student know something about let's say the pathophysiology of hemolytic anemia. A situation where the red blood cells break down too rapidly in the ~~the~~ blood stream. But that's of no avail to him if he can't also feel the spleen. OK He's got to be able to ~~do~~ do a physical examination to make the diagnosis. So we're not either / or but we're both/and. We ~~like~~ like our students to be firmly grounded in the ~~the~~ hard basic sciences and then we build on that clinically, because we try to teach them not to learn ~~medicine~~ medicine like a cookbook, you know if you've got toxemia pregnancy, this is what you do 1-2-3-4-5, but to learn the pathophysiology because sometimes you want to take step 4 ~~for~~ before you take 2. ~~And~~ And that ~~requires~~ requires thinking physiologically. I don't know whether I'm making myself clear, but that's what we try to do here and that's why I'm so firmly in favor of the sort of curriculum which is getting old fashioned now in many medical schools, which says you go to learn these things ~~before~~ before you become a good ~~g~~ doctor.

? That sort of medical treatment is the least expensive too isn't it?

A lot of medicine .... most people get well from disease by themselves, before you ever ~~have treatment~~ had treatment, the infectious diseases, we've increased the age at which people die but you know we haven't stopped the number who die obviously, you've just changed, ... if you ~~do~~ don't die from one thing you're going to die from another. , eventually. And maybe a poorly trained doctor, one of these cookbook doctors, will do just as well, I don't know there are no hard figures, let's say 85%-90% of the patients he treats, maybe 95% of them will be the same as the ones that I would treat. I mean if he doesn't know the thing ~~the~~ physiologically and so forth. But it's that edge of those ~~difficult~~ difficult cases, that ~~the~~ 5% or 10% where being able to think physiologically makes the difference, you know that you're going to ~~save~~ save, where the intervention is going to make a difference, in other words how you intervene is life saving. and I think our kind of doctor resorts too. Now there is an economic import too. I'm on a big kick right now trying to get away from the idea that you have to do every laboratory test in every patient to have a complete work-up. That's foolish, ~~that~~ that costs a lot of money and yet one of the modern trends is just to run the ~~blood~~ blood and everything through the autoanalyser and make all your decisions and diagnoses on the basis of laboratory ~~tests~~ tests. Now that's where an economic , when to hospitalize, when not, if you think physiologically, I think that's where the difference is, I might choose, knowing what's going on with the ~~disease~~ disease not to put someone in the hospital where somebody with... says all ~~patients~~ patients with ~~toxemia~~ iotaxase (?) ought to come in the hospital and get the laboratory tests. It ~~really~~ is cheaper, but I don't think that's the primary benefit.

? What or who influence the balance achieved here?

I don't know if you could focus down on one person... through the years, even when this ~~school~~ school was in shacks, we always ~~had~~ had distinguished people here ~~and~~ in the deanship and in the chairman of major departments... you look back even when we were in the shacks you had a Tinsley Harrison as chairman of medicine or ~~Carly~~ Carly Moyers as chairman of surgery, or you had a dean like Agard, you know who were very ~~eng~~ enlightened people. But it's my opinion subject to the charge of bias because he's also my friend ~~and~~ and the chairman that the premier influence here through the years was Donald Seldin.

SHACKS



*American Medicine model*

I think he ... I think he's the greatest man in American medicine and that he holds to a vision of what medical education is that he's sort of a modern day Jeremiah, you know, he's sort of ~~fix~~ of..not really alone, but ~~he's~~ he's holding to this you know really almost pleading for ~~this model~~ the maintenance of ~~the~~ this model which has been so great and made American medicine the ~~greatest~~ greatest. Used to be, even when I came up maybe twenty or thirty years ago it was common to go away from the US to get your training in Europe and so forth, now everybody wants to come here to study. You know, and that's the result of this model and he had that vision here. I think, maybe he's even gone a little bit overboard, he was so insistent that the basic sciences be strong that he was ~~walk~~ often times willing to constrain the growth of his own department in terms of space and resources to be certain that the basic sciences grew, and what we see on the campus now is, you know almost palatial. Buildings for the basic sciences, and many of us who "ve been here for a long time, I'm in the same ~~shape~~ shabby laboratory that I was, you know... but that's OK I mean ... I think it's got unbalanced a little bit, I think we need some more space and support now. But it was his influence and his dream of the combination clinician investigator who was grounded in research and grounded in patient care and grounded in teaching, you know the traditional three part model of medical education that the medical school clinician should be the investigator who publishes in distinguished journals, who teaches medical students, and post graduate components of our ~~academic~~ society, that is physicians in practice and interns and residents but who also takes care of patients, he's ~~not~~ hidden ~~away~~ away in an ivory tower but he ~~actually~~ actually sees sick people you know. And knows the distresses and anxieties, and so forth of those who are sick. This is the model that he developed. I think it's clear now. I wouldn't want to say that there are not major contributions by other individuals but if I had to single out one person that's who it would be.

s ?Name some other Flexner model schools in the US?

Washington University at St. Louis, is another school which has held to this model, very well, I think that one can name other schools that do this, I think Vanderbilt, ~~also~~ attempts to do this, University of Washington at Seattle I think attempts to hold onto this model in the past I had thought that Harvard did too, though ~~they~~ their model differs a little bit in that there's not as much input from a full time faculty into their hospital teaching situation, but I don't want to be quoted on that, that's a judgement... it may not be fair. But there are other schools, I think, in my opinion the best schools in the country have held onto that model..So if you wanted to make a list of what most people would say were the outstanding medical schools in the country by and large I think it would be fairly close correlation between holding to this model. Now this ~~doesn't~~ doesn't mean that students that come ~~out~~ out of the schools that have ~~changed~~ changed aren't ~~bright~~ bright and can't learn, but we take interns from all over the country and I think there's a big difference in the way that interns who come from schools that don't have this strong training react as compared with those who come out of our own school. ?Can you say something about ethics?

It's very complicated, but I can say this... I was chairman of the human research committee. for (I'm on many committees ...) ~~xx~~ but I did spend several years as ~~chairman~~ chairman of the human research committee and very simply for many years ~~xx~~ experiments ~~dx~~ were done on humans that were essentially unregulated. Now I think that there were very few abuses ~~that~~ of this ~~in~~ but ~~it's~~ it's clear that there were circumstances in which doctors did experiments on humans, oftentimes themselves by the way, which had danger involved in them and following WWII with the sort of horrible medical experiments that were done



in Nazi Germany and so forth there was a generalized revulsion in the world against human experimentation and it was there was a very strong wish among many people that no human being exploited, and particularly no human being who might in some sense be coerced like a prisoner or a young person or something of this sort. So basically now every institution and every individual investigator who ~~has~~ has a ~~xxx~~ grant, must give assurance to the granting agency and to ~~the~~ the university that the experiments that he does on patients involve several things but the preeminent thing is that there be ~~xxx~~ informed consent. That is to say that the subject know fully the risks as well as the possible benefit to both himself and to society from the experiment which is being carried out. Now it's almost impossible to advance in medicine without doing human experiments so it's ~~xxx~~ critically important to maintain the concept of human experimentation, but it must be carefully modulated to be sure that ~~there~~ there ~~is~~ are no abuses. Now there are many types of human experimentation that are perfectly safe that is to say it really involves measuring let's say a blood constituent ~~or a~~ urine constituent where somebody is being treated for a disease as he would ordinarily be treated and that has essentially no risk and the human research committee does not balk at all. All they want you to do is to ~~ex~~ tell the patient that you're taking their blood not for therapeutic purposes but you're going to use ~~f~~ some of it for research, most patients are perfectly willing to do that. There are other circumstances in which one may do human research in which there's a slight ~~amount~~ amount of risk but it's very minimal and this can be spelled out. For example an experiment in which radioisotopes, radioactive isotopes were used to measure the production of some body chemical. But you get very low levels which have been determined not to be dangerous and that you give them in a form which is rapidly eliminated from the body and so this is safe, but you tell them that there is a risk involved ... there are other situations in which there may be significant risks, but that the potential benefit is even greater than the risk and ~~at~~ often times a human research committee will approve that. For example we have several patients here that have been studied by Dr.s Goldstein ~~xxx~~ and bBrown that have young children who have a disease of hypercholesterolemia who have heart attacks before they're the age of ten and die very young OK. Well we are applying to use a new and ~~experimental~~ experimental drug to lower the serum cholesterol on that, under circumstances where the drug has not been given to humans it may have potential danger, but we know they're going to die very rapidly if we don't do something and under those circumstances since ~~xxx~~ in experimental animals this will lower the serum cholesterol very dramatically, we may get informed consent from the patient or the patient's family to try something which may prolong or ... his life or bring him comfort in a situation where there is no other opportunity for comfort. Which has high risk, but that the chance for benefit is even higher. Occasionally one will have a situation where there's no potential benefit to the individual but there's very rich potential benefit to the society in which a person may voluntarily choose to participate in an experiment. And human research committees may approve that also. For example ~~xxx~~ a patient who's known to have extensive cancer and knows that his life expectancy is short may agree to the use of a toxic drug in the hope that something may be learned that may eventually lead to an advance in the treatment of ~~xxx~~ cancer in which it has no potential benefit for him at all. But his has to all be spelled out. So now in every university there's a committee of 8 or 10 people usually who go over each research grant involving a human being to determine its safety, to determine if informed consent is rigidly adhered to and that the risk to the patient is



is not out of proportion to potential benefit to him and his society. It's a very important thing to do. On the other hand one has to separate out the sort of hyperemotional response, amongst some people which would tend to cripple all research with humans. There's a very strong movement for example to do no experiments on abortuses or fetuses. That's coupled with the emotional response of people who don't want to have abortions done under any circumstances. Now without making any judgement on the rightness and wrongness of abortion for any reason, there are clearly circumstances where spontaneous abortion, occurs or where the mother's life is so threatened that the fetus has to be taken, and to ban research on that because of the emotional response against abortion seems to be counterproductive. Because there are many things we need to learn about genetic diseases which are assuming an increasing proportion of the diseases of man, which can only be studied in human fetuses you see. So there are many complicated issues that are involved in medical ethics and research along these lines to take hours to discuss them. The only thing I want to emphasize is that our university is committed and our faculty is committed to the viewpoint that the person who places his life and his health in the hands of the physician must be assured that the physician will treat it with respect and dignity and safeguard it in all aspects and that if he chooses to participate in some advancement in the fight against disease he does that in a fully informed way so that he does it by choice and not by any sort of coercion.

?Some of your research?

Dr. Denis McGary, my colleague, and I work primarily in the area of what's called ketogenesis. Ketone bodies are strong acids that are produced under the circumstances of diabetic coma. In other words when a diabetic person goes into coma he goes into coma because he has a marked increase in the concentration of these ketone bodies or ketone acids in his blood. For the last several years we have been working out the biochemical mechanism why, how this process is uncontrolled and I think it's very fair to say that we have developed the current working model of ketogenesis which is now widely accepted as being correct and really quite opposite to the viewpoint that was held only a few years ago. In fact when I published my first paper questioning the dogma of ketone body production in 1967 I had a hard time getting it published because there was such a fixed as to how this was done so we are now narrowing that down further and further and really working at the subcellular level to try to understand the changes that .. in enzymes and molecular reactions that control this process. We've also worked out some inhibitors of the enzymes that make these ketone bodies that we think may have very major impact on the therapy of diabetic coma in certain instances. But those, the use of these compounds is just now being carried out in animals and we have not done any human experiments. yet It will be a while before the toxic studies are finished. So we work in animals, the area of diabetes primarily.

Safeguards  
Patient  
research