Note:

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These documents are digitized and provided on an "as is," uncorrected basis, in order to maintain their historical integrity.

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

Filename	PDF Version Page	Error
jmf_int_transcript_Williams_2_2_1976.pdf	20	"Parkalnd"
jmf_int_transcript_Foster_2_2_1976.pdf	2	"trememdous reseurce"
jmf_int_transcript_Neaves_1976.pdf	6	"Andreas Baselius"
jmf_int_transcript_Schermerhorn_1976.pdf	18	"Moreove"

Unger

The OBJ ~~de~~jectives of our lab are primarily related to finding a means to improve the present management of diabetes which really hasn't progressed significantly since the discovery of insulin more than half-century ago. Our interest had focused on a second hormone of the islets of Langerhans, which are the cells in the pancreas which secrete insulin. Right next to the insulin-secreting cells are cells secreting a hormone known as glucagon, and glucagon has exactly the opposite effect , effects exactly , what, can I go back?

?Sure?

The effects of glucagon are precisely the opposite of those of insulin. That's one thing that has been discovered and confirmed that's accepted by everyone. The second thing that is now generally accepted is that in all forms of diabetes in addition to there being a deficiency of insulin, there is an excess of glucagon, the hormone that has effects opposing those of insulin. Consequently we regard diabetes as a double trouble, insulin deficiency coupled with an excess of glucagon. Treatment has focused only on replacing insulin. It has not focused on reducing the high levels of glucagon, and it's in this area that we've been working.

The work began really about 18 years ago when we developed a way for measuring glucagon in the blood, and prior to that time, it was not certain that glucagon was a hormone. This was established in the 1950's and early '60's and then...

?Where working then?

Here, it was all done right here. soon after I moved to

Dallas. All of that work was done here in Dallas at this institution. The demonstration in 1969 that all diabetics have an excess of glucagon led to the present area of our research interest, namely finding a way to suppress this. And we are now in the process of testing a number of agents that suppress glucagon and cause remarkable in the control of diabetes.

?Photographs?

Those are our post-doctoral fellows.

?Do they play a large part?

Yes.

?Privilege for them to work here?

Well, it's a privilege for them to work here, and it's a privilege for us to have them work here.

?Thery're from all over?

Yeah. Not too many from the U. S. but....

?How carry out research?

Well, we have many laboratories and many post-doctoral fellows, each one is semi-autonomous with respect to the nature of the work they do, since they're in different disciplines. We have one individual doing dog physiology, and we have another individual doing clinical studies in humans. We have another person doing research work at the molecular level. There are other people doing morphologic research. And ultimately they all come together, the motivation for all these avenues of research are the same, namely to focus on the abnormality in the cells that secrete glucagon and insulin, and fortunately we have an assortment

of different techniques and approaches, each of which tells us a part of what we want to know.

?You teach also? Medical school.

Yes.

?And in graduate school?

No.

?Any graduate students work here?

Yes. We have one graduate student working here now.

?Can you mark your progress?

Oh, yes, we started out with a technician.

?What did you start out with?

Well, originally we were working on a somewhat different problem, also related to diabetes, it was when I first got here ~~and~~ in 1956, oral drugs had just been introduced in the treatment of diabetes, and we were very interested in those agents and how they worked, and I got most of my research experience, through working with Dr. Leonard Madison, who is ~~there~~ also in the department of medicine here and after working with him a couple of years, I came over here and worked on my own and tried to develop the immunoassay for glucagon, radioimmunoassay for glucagon, and we had a remarkable.. we had a lot of good luck, and with the help of Drs. Yallow and Berson, Dr. Berson is dead now, but Dr. Yallow is ,and Berson were really pioneers in the field of radioimmunoassay, and were kind enough to help out ...

?Were they here?

No, they were in New York City, and they'd just gotten the idea for radioimmunoassay. I got the idea at about the

same time. And told them about it, and they were really kind and helped me get started in glucagon, and I continued to develop an insulin assay.

?Close network, not working in Dallas alone?

Oh no, this is a world center and , in scientific research, and there's no feeling of isolation here. We're right in the center of the country, and really...when I first came here, I must admit you did feel isolated because Dallas was not recognized as a center.

?Today it is?

In many areas, yeah, it's the number one center for ?

?Your area and what other areas?

I think in our department the work of Goldstein and Brown in atherosclerosis without any question has revoltuionized that entire field. In the diabetes field in general Dr. McGarry and Foster, and Dr. Madison and Dr. Selzer are internationally known.

?Do you see patient?

Yeah.

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