

**Interviewee:** Easton, Dexter  
**Interviewer:** Robin Sellers  
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**Sellers:** Tell me, if you would, where you grew up, where you went to school, and where your college was.

**Easton:** Well, I was born in Pigeon Cove, Massachusetts, which is on Cape Ann, next to Rockport, close to Gloucester. At the age of six, my family moved to Tenant's Harbor, Maine, where I went to school until the middle of my first year in high school. Then at that point, my dad found a job down in New Jersey, so the family moved there, except that he thought that the schools in this particular place in New Jersey weren't very good. So he arranged that I stay with my cousins in Rockport. So I was in high school in Rockport. As an only child, that was pretty good for me because I had four cousins that I was living with there.

**Sellers:** When did you graduate from high school?

**Easton:** 1939.

**Sellers:** That puts you as a target for World War II, doesn't it?

**Easton:** Well, actually I wasn't in the armed service. We'll get to that in a moment. When I graduated from high school in Rockport as the valedictorian, a gentleman from Clark University came around trying to get students for Clark. He was in the Theater Department [chuckles]. I was recruited ... got a small scholarship. I also received a small scholarship from the community of Rockport, and so I entered Clark University in '39 and graduated in '43. At Clark, I majored in biology and my principal professor at Clark, Professor Rudolph Nunnemucher, thought I ought to go to Harvard where he had gotten his degree, so I interviewed and was accepted. I taught pre-medical students, for example, as a graduate student when I was there. I got my Ph.D. in 1947, at Harvard. I didn't participate in the war effort except my teaching of the pre-medical students.

**Sellers:** The pre-med students that you were teaching - were they aware that they were destined for cannon fodder?

**Easton:** Oh, yeah. They were in the so-called V-12 program.

**Sellers:** V-12 Navy program, okay. Was there any question amongst them as to why you were teaching and not in the service?

**Easton:** I don't remember any questions raised in that regard.

**Sellers:** So you didn't have any problems about that.

**Easton:** Yes, no problems.

**Sellers:** Okay. Was there any public question why a young man of your age was not in the military service?

**Easton:** Well, if there was, I was not aware of it. I felt perfectly comfortable. Being somewhat of a pacifist, I was quite pleased by being in that situation.

**Sellers:** You graduated from Harvard in '47 and started looking for a job?

**Easton:** Well, I didn't have to look. In those days there were plenty of jobs available and my professor, John Welsh, thought I ought to go to Rutgers, I guess it was, in Jersey. But at the time, I got married and my wife and I decided we would be more adventurous and go up to Seattle - University of Washington. I accepted a post there instead. Drove across the country in a 1934 Packard car.

**Sellers:** How long did it take you?

**Easton:** Oh gosh. Quite a number of days. We went through quite a number of national parks and so on; it was a lot of fun.

**Sellers:** So you made it an excursion?

**Easton:** Yeah, right.

**Sellers:** How long did you stay in Seattle?

**Easton:** Well, I was there from '47 to '50. At that time, my wife decided to abandon me, so to speak, and join instead a gentlemen from her homeland. She was actually from Holland, you see, and this chap had apparently been pursuing her [laughs]. So anyhow ....

**Sellers:** Okay - we can kind of slide over that [laughs].

**Easton:** I had at the same time arranged to get a Fulbright research fellowship, which I took in New Zealand with Sir John Eccles, who was an eminent neuro-physiologist. I was there for a year. Sir John Eccles, at the end of the year that I was there, took a post in Canberra, Australia, instead. At that time, the new capital of Canberra had just been completed and ... a new university, the University of Canberra. He headed up the Physiology Department there at the medical school. I returned to Seattle, and to the Zoology Department where I had been

before. I stayed there for another two or three years ... well, actually not that long - about a year or two. Then I joined the Physiology Department at the medical school. The medical school was just getting started, so to speak, the way they are here. It was a good place to be.

So then in 1953, I married again - a lady from Springfield, Massachusetts, who was out there in Seattle as a librarian. She had gotten a degree at Carnegie Tech. Then a post opened up here. Well, in Seattle I had been doing my particular kind of research on marine organisms mainly. I was interested in the nervous system of marine animals, especially crustacea, crabs and that sort of thing. I had gotten my degree using crustaceans as well. I had spent some time at Friday Harbor, which is a marine station up in Puget Sound, north of Seattle, and I was alerted that a post opened here in good old Florida. They were just sort of getting things going here. I had heard, in 1950, about a post here but I hadn't bothered about it. In '55, I decided to come down here and join the Physiology Department. Professor Biedler, recently deceased, was the head of the then Physiology Department.

We came here with our one child, and joined the department. At the same time ... Harry Lipner was another faculty member at the same time from Chicago. As I said, the department was just being sort of built up at the time. Shortly after I came, there was agitation about combining the several departments here. We had physiology, bacteriology, zoology, and botany. The dean thought that was highly inefficient, I guess, and ....

**Sellers:** Who was the dean at the time?

**Easton:** I can't remember. Well, of course, a committee of the faculty had to be appointed to decide what to do [chuckles]. As the new man on the block with this wonderful background of modern biology, I became the chairman of the group to consider that matter. We affirmed that it would be an excellent idea [laughs]. That was an interesting time with, of course, a lot of discussion. Some of the older members, being somewhat wedded to the status quo, thinking that it ought to be just as it was - the separate groups.

**Sellers:** Who were some of those older members?

**Easton:** Ah, well, it was Dr. Breen, and Pates, Ellias ... women ... the holdovers from the days of the women's college. Madsen was another one.

**Sellers:** That's a substantial group.

**Easton:** You know, with the women there, there were several men, of course.

**Sellers:** When you got here ... the names of the older ones that you'd given me are women and they are holdovers from FSCW. Were most of the newer hires men and the older ones women?

**Easton:** Yes. I think that could be ... that's certainly true.

**Sellers:** Were you aware in any way that there was possibly an attempt to hire only men as newcomers? Did you ever get that feeling?

**Easton:** No. I don't think so. But, inevitably, there were more men available than women. So that was simply the fact of the matter. Since that time, of course, we hired a number of women here, and I'm certainly glad they have. We need a diverse group.

**Sellers:** Well, it seems like about the first ten years of the university, there was kind of a subtle but determined attempt to play down the women faculty and strengthen the academics by bringing in men, and I was just wondered if that had been evident in any way.

**Easton:** It seems like certainly a very reasonable sort of thing to do, since it was practically all women to begin with. I think it was inevitable if they wanted well-trained people; most of the pool available were men, in any case. I don't think there was a definite effort to shut out women. I mean, I like to take the high road.

**Sellers:** You just looked more closely at men's applications [laughs]. Well, whoever was doing the looking.

**Easton:** I don't remember having much to do with who was being hired. I'm sure I did, but I don't remember. My interest was in doing science and I had been pretty well disconnected from .... [laughs]

**Sellers:** The administrative point of view.

**Easton:** That's why I lived so long [laughs].

**Sellers:** The women that you did work with, whether they had been here or whether they came in new - did you find them competent?

**Easton:** Why, sure. Dr. Pates - I worked with her jointly with a student. She was interested particularly in ....

**Sellers:** Botulism.

**Easton:** Yeah, right, botulism. That's correct. We were concerned about the fact that botulism ... or the botulism toxin on neuro-muscular transmission. That was my interest. I had almost forgotten about that student.

**Sellers:** Did you ever go "vulturing" with her?

**Easton:** No, I didn't. I thought that was a fascinating pursuit that she always got the vultures and my student made use of them. But I never went vulturing with her [laughs]. I had

problems of getting fish, instead.

**Sellers:** So you came in '55. Where were your quarters, where were you housed?

**Easton:** Well, when we first came, as I recall, it was up in the old History Building. We were occupying the corridors of the History Building [laughs]. Then not too long after, I was made aware that there were quarters over on West Campus, they called it, and especially in connection with what we then called the Psycho-biology Program (which I am accused of having named). It was a combination of interests between the Psychology Department and the Physiology Department with Kenshalo and Baker and later ... I can't remember ... Biedler and myself ... and Jim Smith later, as I said. Not too long after, of course, they started to refurbish Conradi Building so that it could become a biology classroom ... I mean a biology laboratory. So I was installed there for a while. Then, they began to make noises about another biology building, which being the second biology building, they named Unit 1 [laughs].

**Sellers:** Of course.

**Easton:** My principal concern was designing ... having a hand in designing the tanks back in here that we keep fish in at the present time. Those tanks have been refurbished since then in a different way to accommodate the present group of people we work with.

**Sellers:** Did the oceanography or the marine biology program come in in any way?

**Easton:** Well, that was another thing. I guess when I came, we didn't have any biological station down there. But facilities were developed, and I worked down there – the old biological station, which is on Alligator Point near where the water tower is. And there were also quarters there for the president to hang out. Well, Dr. Kellogg in psychology had the tanks there for his porpoises, and in the building they had seawater pumped in. We had water tables and so on. So I made use of those facilities at that time, working on the nervous system of the triggerfish - file fish, actually, same kind of critter with a spine in the back that's dangerous. I was interested in the mechanism of control of this spine, the neuro-muscular machinery.

Then there was a problem of where should the biological station be, as it were, placed in the administrative scheme of things and the question whether it should be Biology or Oceanography or be separate or whatever. As I recall, I was on the committee to decide that and at that time I guess ... golly, I don't quite even remember. I guess Biology had it for a while. Currently, I believe Oceanography has charge of the one that's on Turkey Point. So that was an interesting series of committee meetings, which as I say, I don't really recall very much about. Dr. Fisher was the chairman of it. He was subsequently shot by a student.

**Sellers:** Oh, he's the one.

**Easton:** He's the one. Well, let's see, while I'm about it, one other university committee I was on was the Bicycle Paths committee [laughs]. I was one of the few people who rode my

bicycle every day to work, so I figured I ought to know something about that. That sort of didn't come to much; we made some recommendations, none of which were carried out. The bicycle path system is just as inadequate now as it ever was - even worse, of course, with all the traffic.

**Sellers:** What changes have you seen in the campus over the years?

**Easton:** Good grief [laughs].

**Sellers:** When you came here in '55, they were just starting the fifty-year plan, which sort of evolved in five years to be a monster. There have been all kinds of buildings and emphasis switches and things like that. What do you think has been the most important in those aspects? You're probably going to tell me from a scientific aspect. But, I mean, as far as bringing in students, the caliber of students we've brought in and things like that. How as the emphasis changed over the years?

**Easton:** Oh, isn't it the football team that has brought in all the students [laughs]? I think one of the more dramatic thing on the campus is that enormous palace around the stadium. That's overwhelming.

**Sellers:** What about during the '60s and the '70s? There was steady growth there, but it wasn't spectacular. Do you remember anything in particular?

**Easton:** Well, what I remember in particular about my participation is in those days we had a very large number of students in the physiology classes. In fact, the physiology section of our department had the major teaching load in the department. We had by far the biggest number of students. We took care of nursing and physical education, all sorts of things. Those groups subsequently developed their own programs, so they didn't have any need of us anymore. So our program in that regard reduced somewhat. Those were the days when we had, as I say, all those big classes. I had seven sections every week, and fortunately there were regular student assistants who would help out. At the same time I gave an advanced course in neuro-physiology, so fairly heavy teaching loads back then, which have become quite a bit reduced now in recent years. Now when a faculty member comes in, he's given, the first year, essentially time to set up his research and so on. Back in those days, the first thing you ... when you came in, you had three courses to get ready every term. That was true back in Seattle, too.

**Sellers:** Proportionally – research, teaching, publishing – when you first got here, what was the emphasis?

**Easton:** In sciences, research is always given primary emphasis. And the graduate program - we try to develop the graduate program as much as possible. I feel that undergraduates have not been, perhaps, adequately served in a big university like this, as they are in, for example, Clark University, where I got my bachelor's degree ... places like Swarthmore and other small colleges, and Reed in Oregon. In these smaller colleges the

undergraduate is, of course, the main thing. In these bigger universities, the graduate students are the main thing. The graduate program becomes almost a business with recent connections with business outfits that can profit from the work that it's done. That wasn't the case back in the early days when I joined things. We were concerned with science for itself to a greater degree.

These days, they're always looking for a gene to patent or something of that sort [laughs], which is an area that grew up after I got my training, so I feel not exactly very much at home in the great world of genetic engineering and so on. I think it's a wonderful development and it really gets to the basis of biological mechanisms and so on. I sort of have to flit around the periphery on it. The neuro-physiology kind of things that I am more acquainted with have almost become old-fashioned.

**Sellers:** Talk to me a little bit about the neuro-physiology. What exactly did it involve and what applications came from it as far as what did you learn? What is it? Investigation for the sake of knowing how it worked, or could you then apply it to auto-sensory perceptions? Tell me what you did with it.

**Easton:** Well, of course all of our modern technical society and so on is based ultimately on fundamental research in science. The person interested in nature, just from the standpoint of curiosity, is often dismayed by the distortion of his intellectual labors into the marketplace. It has been very useful to help support science further. I think Biedler, in this department, was certainly the most successful in this regard. His interest was in mechanisms of taste and smell and he developed a compound for ... what was it for? The sweet-tasting system. He also had a group working on olfaction.

**Sellers:** Jim Smith was quite involved with that, was he not?

**Easton:** Oh yes, yes. In fact, the program in the present neuro-science has a large component of concern with taste, olfaction. As for my own work, there was absolutely nothing that is of practical value, but .... Well, there was several sorts of things that I looked at. Being interested in the mechanisms of nerve impulse transmission along the nerve fiber and the neuro-transmission between nerve and muscle, I did occasional collaborative work. I worked with Mike Kasha for a while. I got interested in fluorescence and nuclear magnetic resonance, so I fooled around with that a little bit. This is in the beginning when those techniques were beginning to be applied, and I really didn't have the background to, but I learned quite a bit about it and got some work done on it. Shortly thereafter other people began to develop it to a different degree. For example, I was looking for a signal that would ... a fluorescence or nuclear magnetic signal that would be associated with the nerve impulse propagation. So I developed some techniques for looking at that. The first thing, of course, you have to have a proper specimen to observe this sort of thing, and I wanted to find a nerve where I would have an enormous amount of surface membrane compared to the amount of stuff. I talked with Ralph Yerger; he was a member here in zoology. He alerted me to the garfish. You know the garfish?

**Sellers:** I'm familiar with him, yes.

**Easton:** He's an amazing critter with a very long snout. I wonder if I have a .... Yeah, here - there happens to be a specimen of garfish snout [laughs].

**Sellers:** Well, I must say this is the first interview I've done where I've been treated to a garfish snout [laughs].

**Easton:** [Laughs] Well, here's the garfish snout. There are two nerves going ... here's the end of the nose, it detects odors, and this represents the long nerve that goes to the brain. Isn't it amazing? So long!

**Sellers:** And it actually is that long?

**Easton:** Yes. Ten million nerve fibers on each of these. So you see, with ten million nerve fibers ....

**Sellers:** That's about a foot long.

**Easton:** Well, in a good big fish it would be. I used to go down to Lake Apopka and bring back a load of these fish. They were so common there, that people would get them out of the lake and dump them into the local dump ... get rid of them, which was quite amazing. Now they've practically become endangered. Ah, yes. We had to keep them locally in tanks here and I also had ponds built out at the ... what we called the Farm. There's a place, you know that you had to ... that was called the Farm.

**Sellers:** Was that out on Levy and Lake Bradford Road?

**Easton:** Yeah. And then there was another ... the greenhouse property over on Mission Road. We had some big tanks built there, too, and local kids would go dumping things in and there were problems. That was an interesting time.

**Sellers:** From this information, what was the practical application? Was there one or was it just knowledge - understanding how neuro-muscular transmission worked?

**Easton:** I've not been concerned about anything practical. I take the scientific ... what should we say ... the pure scientist's view. If something is interesting, you try to figure out what's it all about. Somebody else wants to find it useful.

**Sellers:** I'm wondering if maybe now, with artificial limbs, where the neuro-muscular triggers and things like that.

**Easton:** That's right. Of course we can now put electrodes in the brain.

**Sellers:** Wouldn't your work have some application in that?



**Easton:** Well, it's that sort of thing. I worked with mammals to some extent. When I was with Sir John Eccles, we worked on the spinal cords of cats. Cats were the most appropriate for studying the spinal cord; the way that the muscles are controlled by nerves coming from the spinal cord can be studied with electrodes in the spinal cord. When I returned to Seattle, I worked with Dr. Woodbury on the same kind of thing.

**Sellers:** When you first came to Tallahassee in 1955, you had been in the Northeast and you had been in the Northwest. Had you ever been in the South before that?

**Easton:** Never. I didn't know anything about the South.

**Sellers:** What was your impression? Did you come for an interview before you decided to come?

**Easton:** No, that's the interesting thing. Back in those days, people just communicated with ... "You look like a good subject; come on down, have this job."

**Sellers:** Who was the contact here?

**Easton:** That was Biedler. Nowadays, of course you bring people in for an interview. We just didn't have the money back in those days for this sort of thing.

**Sellers:** And I'm not sure that they thought it was necessary back then.

**Easton:** That's right. Get a good recommendation and they trusted your colleagues. But there's so many now.

**Sellers:** So you were in the Northwest and you had a fairly new wife and a young child, and you packed up and came catty-corner across the country.

**Easton:** With all our goods in a small, two-wheel trailer.

**Sellers:** You made another excursion [laughs].

**Easton:** When we came in, we came along north Monroe, and the first place we stopped was the Lake Ella Motel. Back in those days, all those nice little stone shops - it was a motel. That has certainly changed since then, that general area.

**Sellers:** It has. Did you have any first impressions, good or bad, of Tallahassee or the campus?

**Easton:** Well, I saw it as a nice little sleepy town. As I said, I rode my bicycle for twenty-five, thirty years. Actually, the first two years, I guess I still drove my car, a little car. But back

then I recall a time when there was no stop lights or stop signs between Waverly Hills (we had bought a home there in 1956) and the university [laughs].

**Sellers:** Waverly Hills was way out in the boonies.

**Easton:** The house we had, we could see one house in the distance. We were very definitely outside the university.

**Sellers:** Plantation living.

**Easton:** That's right, it was a plantation ... hadn't been developed. We could walk up north there, past the areas where I-10 cuts across (which wasn't there, of course) ... walk up to that general area; it was nice fields and so on. Going toward the university, I remember I could walk over to approximately where the old Publix used to be. Along there just about the only thing was sort of a hardware store, I guess it was. There wasn't anything else there [laughs]. Actually, a place we stayed at for the first year, Buena Vista Street., which is kind of off to High Street, down there coming down to Tennessee Street.

**Sellers:** So you were only about six or eight blocks from campus.

**Easton:** At that time, for just less than a year. Down there, at the foot of Buena Vista, on up Tennessee, there was a big food stand and nothing else. The whole damn street ... Tennessee was a street in the country. Then there was a fire; the food stand burned down. Very shortly thereafter was a great development of business places along Tennessee. I always thought that was very suspicious. I'm very sorry to see the way that Tennessee has developed; it's such a display of too much stuff - lights and awful signs.

**Sellers:** There doesn't seem to be any forethought, does there?

**Easton:** The control of beautification of the street is just completely absent. We don't have in this country some of the aesthetic senses that seem they seem to have in many European countries – a community decides they don't like all that stuff. All these signs are informative, I suppose, but they're certainly an insult to the aesthetic sense, as well as annoying to driving along there.

**Sellers:** I think that's the case all over the country. We're becoming barbarians all over again.

**Easton:** Well, I suppose. We'll stay barbarians as long as we have the Bush administration in there.

**Sellers:** Oh, hear, hear, yes. Wasn't that a great caucus last night?

**Easton:** Well, yeah.

**Sellers:** Well, before we turn this political, what are some of the high points that you recall of your tenure here?

**Easton:** Well .... [laughs] I certainly have enjoyed being able to participate in this neuro-biology program. They have a fine series of seminars, of visiting people and so on, of lots of local people, and I'm continually amazed by the expertness of so many of my colleagues and how well they're able to talk about their activities ... and currently, too. Gosh, just the other day, Tom Roberts, who used to be our chairman, gave a talk on worm sperm [laughs].

**Sellers:** There's one I would have slept through [laughs].

**Easton:** Well, you know the amoeba?

**Sellers:** Yes.

**Easton:** Here again, you want to know the mechanisms ... how does the amoeba move along? Well, the worm sperm happens to be just like a little amoeba. And so they use very ingenious techniques for finding out what's going on in these very tiny, microscopic critters. The expertness of people in understanding such very small things is so extraordinary. Being able to listen to and to participate in this sort of thing has been really making it worthwhile being here. I like that very much. When I came, and since then, we've had such excellent support facilities. Our machine shop down there - right from the beginning, I was able to use it and all the students that participated in it, too. Actually, that's sort of gone backwards. Nowadays the students don't really get into doing that sort of thing anymore.

**Sellers:** What did the machine shop do? Could it build to your specifications?

**Easton:** Made all kinds of complicated gadgets, some of which I've kept and I'd show you, but I won't bother doing that [laughs].

**Sellers:** So if you needed a particular something and it wasn't readily available, you could draw the specifications or work with someone in the shop or .... ?

**Easton:** I got a lot of fun out of that because I liked gadgets; I liked to design them. When I used to have some grant funds, quite a few years ago, some of my assistants would actually work in the shop too, and do that sort of thing. The machine shop and the electronic shop we had back in the old days ... we could make our own electronic equipment, too. That was extremely useful, indeed. Those, and also we have some staff in other areas. We have this marvelous editor in biology - Anne Thistle, who has done such a wonderful job. She is absolutely outstanding.

**Sellers:** She is organized, isn't she?

**Easton:** She has her Ph.D. in linguistics. To have an editor for the department with a Ph.D. in linguistics and is so competent really is extraordinary. I was much impressed by that. While I was here, I was also ... for one summer I went to Woods Hole and I learned all about the squid giant axon, which is ... do you know what that's all about?

**Sellers:** No.

**Easton:** Well, you know the squid?

**Sellers:** Right. I got squid, yeah.

**Easton:** It moves through the water with a forceful injection of water by jet propulsion. Well, that's a very fast movement. The muscles are very fast. The nerve that operates it has to carry the impulse down rapidly. So it's an enormous, from our standpoint, enormous nerve fiber. In fact, the nerve fiber is about the size of one of these [points to object about the size of a pinhead]. In other words, this giant axon or giant nerve fiber of the squid – one is about the size of that. And here are ten million in this thing [points to nerve in garfish skeleton]. So in that squid fiber we could poke a little pipet into and record electrical events happening and so on. So that's the kind of thing I ....

**Sellers:** When you poke these things into it, it doesn't disrupt the function of the muscle?

**Easton:** No, no. It works very well.

**Sellers:** So you do it very delicately?

**Easton:** You have to dissect ... there's a little business of fine dissection, dissecting it out and putting it into a chamber and poking ... actually nowadays – and back then too – you could poke very fine electrodes, as we call them, into much smaller fibers as well. I was doing it in muscle fibers of the frog, for example, and so on.

**Sellers:** This is done microscopically?

**Easton:** We have a dissecting microscope.

**Sellers:** How about any low points?

**Easton:** Oh, well, you know, I guess I have a good "forgetter." I'm of an optimistic outlook and ....

[End side A]

**Sellers:** Any times when there might have been financial crunches?

**Easton:** Well, I must say I was disappointed when I wouldn't get a renewal of my grant, but when I grew up in the field we didn't have any grants, anyhow. The idea of working with what you got was something I was quite accustomed to. I really was sometimes a little overwhelmed by the amount of opportunity available with grants. It was quite something new. I guess one could make complaints about some of the administration's behaviors now and then, but I don't really remember anything bad [laughs].

**Sellers:** Any particular deans or higher-ups, Office of Research or anything like that, that you would have preferred to see someone else in?

**Easton:** Oh, no. Pretty much the other way. I was very pleased with Strozier, for example. He invited a couple of us over to have dinner with him and the faculty. I thought this was just great.

**Sellers:** He was not a scientist.

**Easton:** No, he was not a scientist, but he had a good general outlook.

**Sellers:** What about the deans that have been in the scientific field?

**Easton:** Well, Dean Baum ... well, you know, I never had any particular interaction with the deans particularly. In general, the deans worked with the chairmen of the departments. It's only occasionally, I guess, that I ... of course, I occasionally interacted with Baum, but not a heck of a lot. He was a very forceful character.

**Sellers:** What about your chairs? Is this a department or situation where your chair comes in and stays for twenty years or do you have turnover?

**Easton:** Oh, no. We elect a chair every three years.

**Sellers:** Is it a new person each time?

**Easton:** Well, the last one we had had two three-year terms and that's usually been the case. We let them stay for two times. That was the thing, Tom Roberts had been great. The chairs have, in general, maintained their own research ... projects are going in good shape, and he did extremely well. The present one, Tim Moerland, will be doing the same, I think.

**Sellers:** Is it the personality of scientists in particular that the chair would not necessarily infringe upon what each person was doing, or would they make an attempt to refocus the department's direction? That happens in History, and I'm just wondering if it happens in sciences.

**Easton:** I think the members of the department are just about completely independent of anything the chairman may have to say. Of course, it's inevitable, the chairman being in a position of having control over funds and so on and is able to move things in a preferential way, I suppose. There hasn't been anything that I particularly noticed. As I said, since my chairmanship of the group that put the department into a coherent form [laughs], I've sort of not gone out of my way to be in committees and so on. I'm not particularly enthused about that sort of thing. I get too emotional about it, I think. I mean, the democratic process is too awkward.

**Sellers:** It is messy [laughs].

**Easton:** I'm an only child, and an only child has certain problems of social interaction, I think, that I've recognized [laughs].

**Sellers:** You never recovered.

**Easton:** I never recovered from [laughs]. I haven't let it bother me, however.

**Sellers:** Can you think of anything else we haven't covered about your years here that you'd like to throw in?

**Easton:** Well, let me see. There was the program in the earlier days when we were getting computers in here. I got one of the first grants to get some computers for general use here and I participated in the PLATO program. You heard about that? PLATO program is ... I think that means something like Program Language And Teaching something or other ... developed by the University of Illinois, Urbana. They had a wonderful program which used display monitors and was entirely different from the programs or arrangements that we have now. There was a time when we had to make a decision about getting rid of it and going to the PCs and so on. I was on the committee that was going to axe the PLATO program, which I was in favor of keeping, but the committee ... I guess they wanted to keep it, too, but I think the dean got around to dumping it anyhow. Kind of too bad, because it was a very good system. I found it particularly useful for doing computations that I was interested in. I sort of was converting from doing what we call "wet" science, bench science, to doing mathematical modeling.

This had become especially important to me after my little session at Woods Hole, where we got a special emphasis on a theory and mathematical model which underlies practically all of modern neuro-physiology. This is called the Hodgkin-Huxley mathematical model of impulse transmission, and I didn't like it. The Hodgkin-Huxley got Nobel prizes, so who am I to complain? But from a mathematical standpoint, I thought it was rather cumbersome and I wanted to develop my own. I have had enormous difficulty in convincing any of my colleagues in the field that my particular view would be better. Not to sound full of hubris, but I guess this is the case when you come up with an idea that is contrary to the usual, there is quite a bit of resistance to it. I've been struggling against that for quite a number of years [laughs]. I still have the papers trying to sell them, as it were.

**Sellers:** Can you not do it individually now, with the laptop and all kinds of ....?

**Easton:** Well, yeah, you can publish on the web and so on, and that's what I'm figuring maybe I better get around to doing. One likes to have it exposed in an area where people will pay attention to it [laughs].

**Sellers:** Well, very true, but it may be that you'll have to show them beforehand.

**Easton:** Well, anyhow, as I said, PLATO was useful for doing this sort of thing, and when we converted to PCs, I had to convert all that stuff. I had no really formal training in this sort of thing, but, there again, we had such excellent support staff. We had people who were computer experts and if I had an idea ... drew it up and the computer person would help me figure it out. So, during this time, I relearned a lot of my calculus that I had forgotten and so on.

**Sellers:** Oh that's why I can't do computers, because I don't know calculus [laughs].

**Easton:** You don't need calculus to do computers.

**Sellers:** It seems like it to me.

**Easton:** Then, it was brought to my attention that these equations are useful for other areas than what I was trying to work them at. As a matter of fact, when I originally hit on this thing, I was looking through a math text that showed a graph of the survival of rats. A lot of rats, as time goes on, less and less and less of them [gestures to describe a survival curve]. Well, a particular kind of equation is describing the behavior of population. One can speak of populations of molecules, populations of cells, and so on. So, that's where I used this, while talking about the electric currents that happen in nerves. That's a population of charged particles, becoming more or becoming less. So, more recently I sort of went back to that original use of those equations describing the survival of populations. *Science Magazine* in 1992 ... someone published a paper on the survival of fruit flies ... 1.3 million fruit flies. He had a big outfit there in California ... everyday they'd count how many fruit flies are still alive. Under these conditions, they lasted six months. Ordinarily, it would last only less than a month.

**Sellers:** Just what we need - experts in the life of a fruit fly.

**Easton:** The question that was being asked in this regard was how can you explain the fact that the older members of the human population, say from 85 to 125, die off less rapidly than the major part of the population? In other words, when you draw this curve for the older population, it's still hanging on.

**Sellers:** So if you can make it to ninety, your odds are better to hang on another ten or twenty years?

**Easton:** That's right, hanging on better - how come? So he said, "Well, do other animals have the same kind of effect?" Fruit flies was a good example; there was 1.3 million of them. They had the same problem. The older ones don't live according to the major population. In looking at the data, I realized they were just using the equation wrong, so to speak. To put it briefly, the conventional way is to write an equation that describes the proportional diminishment of the number alive, and instead, if you look at the proportional increase of the number dead, then the equation fits the data exactly. It was astonishingly exact; every doggone point was the same.

**Sellers:** So in other words, if you figure out how many of the ones over eighty-five are dying, instead of are living longer ....?

**Easton:** That was the idea. It works, as I said, for the fruit fly, but now I'm trying to apply it to the human population. It seems to have problems.

**Sellers:** Well, us humans are so ornery.

**Easton:** Ah, well, actually I can give you an idea why it might be different. The fruit fly, if you had a whole population ... all of them born at the same time. Then you see how many are alive and so on. Human census data ... they stand on the street corner and say, "How many people of this age and that age and that age and that age died this year?" It's a matter of ... in the first instance, it's a more homogenous sort of thing, it's a cohort all born at the same time. The human population ... it's a mixture of cohorts all born at different times. I'm figuring that maybe that's the basis, but I'm having problems with it [laughs]. Anyhow, it's still fun to fiddle with this [laughs].

**Sellers:** To fiddle with it, okay. And you're not going to tell me any low points?

**Easton:** Heck, as I said, I tend to forget them. Of course, as I said, I could make complaints about the social economic systems, but that's where my anger is directed. I don't feel any antagonism toward any of my colleagues. I'm mad at the Bush company [laughs]. Oh, that's another thing. Back in the early days, some of the students were trying to develop a Socialist Club, so they asked me if I would be their mentor. I was for a while, but it kind of petered out.

**Sellers:** Not that far left, huh?

**Easton:** Well, I'm basically a socialist, so I didn't have any objections to doing that.

**Sellers:** I wonder sometimes if students who want to do that actually understand what socialism is?

**Easton:** Well, I think maybe they understand it better than a lot of adults. Socialism ... the



idea is people work together and the young people often get together in cooperative efforts. Think of the group that went down to protest the NAFTA meetings in Miami. They got pretty well banged up, many of them. They had a lot of spirit.

**Sellers:** We just don't have enough of them.

**Easton:** That's right. They're too doggone much co-opted by the School of Business!

End