## Oral History of

# Richard H. Rosenblatt

Interview conducted by Laura Harkewicz 24 January 2006

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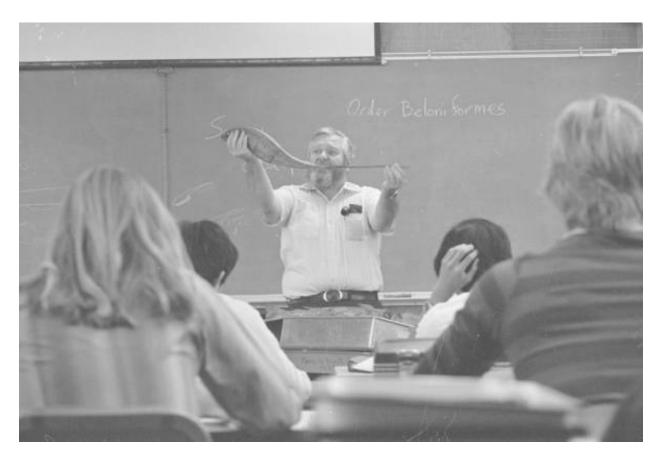
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#### ABSTRACT:

Richard Heinrich Rosenblatt was interviewed in the Helen Raitt Room at the Scripps Institution of Oceanography Library on January 24, 2006. Rosenblatt was born in Kansas City, Missouri on December 21, 1930. He received his Ph.D. in Zoology from UCLA in 1959. His research interests are biogeography and systematics of fishes and the biology and history of shore and island faunas. In his tenure at Scripps, he served as assistant research zoologist (1958 – 1965), curator of marine vertebrates, overall director of the Aquarium-Museum at SIO (1961), associate professor of marine biology (1968), chairman of the Graduate Department (1980 – 1985 and 1990 - 1995), and professor of marine biology and research zoologist. The interview discussed the many facets of Rosenblatt's career at Scripps as well as his interactions with Carl Hubbs, "the father of American ichthyology." Among other topics, we discussed Rosenblatt's first experience with scuba and his experiences as chairman of the Graduate Department at Scripps as well as the first curator of the Fish Collections.

INTERVIEW HISTORY: The interview took place on a typical cloudy Southern California winter morning on January 24, 2006. The interview was conducted in the Helen Raitt Room located in the SIO Library. We talked for approximately sixty minutes. The interview was conducted without interruption except for a brief pause to turn the tape over.

Laura Harkewicz Oral Historian, SIO/UCSD May 22, 2006



Richard Rosenblatt teaching class, 1979. Scripps Institution of Oceanography Archives, UC San Diego

#### INTERVIEW WITH RICHARD ROSENBLATT: 24 JANUARY 2006

##<sup>1</sup> This is January 24, 2006. I'm in the Helen Raitt Room in the Scripps Harkewicz:

Institution of Oceanography Library with Dr. Richard Rosenblatt. Good

afternoon, Dr. Rosenblatt.

**Rosenblatt:** Everybody calls me Dick.

Harkewicz: Okay.

**Rosenblatt:** Good afternoon, Laura. I'm glad to be here.

Harkewicz: Great. Thanks. First of all, I'd like to know what made you choose a

career in oceanography?

**Rosenblatt:** Well, I didn't really get into oceanography until after I came here.

> Remember, oceanography is a very integrative subject and my degree is actually as a zoologist, but I studied marine fishes. So that brought me into Scripps, which brought me into oceanography. I probably would have done the same research if I'd been somewhere else but I wouldn't have

been called an oceanographer. [Laugh]

Harkewicz: Okay. So, what brought you to Scripps?

Well, I was a student at UCLA, and Dr. Carl Hubbs<sup>2</sup>, who was the great **Rosenblatt:** 

ichthyologist, was actually on my doctoral committee.

Harkewicz: At UCLA?

**Rosenblatt:** No, here.

Harkewicz: Oh, here? Okay.

**Rosenblatt:** Well, my doctoral committee was at UCLA, but of course as a member of

> UC he was eligible to be on my doctoral committee, and my major professor at UCLA, Boyd Walker,<sup>3</sup> had been Carl Hubbs' student. And since I was doing a systematic thesis, and that was what Hubbs was famous for, it was natural that he should be on my doctoral committee. And, in fact, I had been at Scripps the summer of 1954. I was paid to work here. I was actually sorting fish eggs and plankton, out of plankton rather,

<sup>&</sup>lt;sup>1</sup> The symbol ## indicates that the tape or a section of the tape has begun or ended. For a guide to tapes see the final page of this transcript.

<sup>&</sup>lt;sup>2</sup> Carl Leavitt Hubbs (1894 – 1979), ichthyologist at SIO.

<sup>&</sup>lt;sup>3</sup> Boyd Wallace Walker (1917 – 2001), professor of zoology/fisheries, UCLA.

for a Scripps researcher named Grace Orton<sup>4</sup> who worked on larval fishes. So I knew the place pretty well, and of course I got to know Dr. Hubbs more then. And I was just about getting ready to finish up my doctoral degree, and at that time Hubbs and Martin Johnson<sup>5</sup> had talked the director into setting up curatorial positions for the collections, and they had the money but they didn't have anybody working on the fish collection. And I needed a job, and I was offered a temporary position here to curate the fish collection. And I came down as, I think, what was the lowest possible position at the time. I was a junior research zoologist. And I did get my degree the following year. I wrote it at night while I was curating the collection. And then, I suppose, after a couple of years I seem to have become the curator of the collection. So I came here as much by accident as anything else. Although this was absolutely the best possible thing that I could have asked for, because it was a position working with a collection, which is what a systematist needs, but at a university, not in a museum, which has been very, very important to me because people who do museum work tend to get more tunnel vision. They're surrounded by other systematists, whereas if you're at a university, you're one systematist with a constellation of people around you who are not, so it really broadens you.

Harkewicz:

Can you explain that a little bit more?

**Rosenblatt:** 

Well, this isn't going to be really about Scripps, but sort of about philosophy of becoming a scientist. I mean, I've had lots of museum experience, and lots of my colleagues and friends are in museums. What you see, museums are arranged with collections and then the staff is sort an appendage of the collection. So, you've got the fish collection, and the offices of the curators and staff are around the fish collection. Then you've got the mollusk collection and people attached to it. And those people don't see each other very much. Whereas at a university, you don't have that situation. Your offices are together, but also, I mean, there are physiologists there. There are biochemists there at Scripps. Now you just would not meet these people, you wouldn't hear seminars given by them the way you do at a university. So there are a few places like this for systematists. One of them the University of Michigan, which is actually where Hubbs got his start. There's Tulane, which has a—and the University of Florida have big collections. But, by and large, collections are not at universities and universities don't have collections. And, increasingly, universities are giving up their collections. We're really fortunate at Scripps that we still have collections.

Harkewicz:

So are they—are the collections more accessible because they're at the university than they would be if they're at a museum?

<sup>&</sup>lt;sup>4</sup> Grace Louis Orton (1916 - ), assistant research biologist at SIO.

<sup>&</sup>lt;sup>5</sup> Martin Wiggo Johnson (1893 – 1984), marine biologist at SIO.

**Rosenblatt:** Oh, not a bit. It's not the accessibility. It's the accessibility of people that

aren't museum-

**Harkewicz:** People? I see.

**Rosenblatt:** —oriented.

**Harkewicz:** More interacting with?

**Rosenblatt:** Yeah.

**Harkewicz:** Okay. I want to ask you a little bit more about that, but I just want to

clarify what year you came here, when you first arrived?

**Rosenblatt:** Oh. All right. I worked here the summer of 1954, and I came here after I

got my degree, or right before I got my degree, in the summer of 1958.

**Harkewicz:** Okay, '58.

**Rosenblatt:** So at that time, of course, there was Scripps. There was no university.

There was something called the School of Science and Technology, which Revelle<sup>6</sup> was using to build the nucleus of the university. And, there were some chemists here, like Harold Urey<sup>7</sup> was here, and Jim Arnold<sup>8</sup>, and a few other people, but there was no university. That didn't come for a

couple of years. And I had no idea it was happening, of course.

**Harkewicz:** Right. Now, I know that prior to UCSD's founding people that got their

degrees from Scripps got it from UCLA Scripps Institution, but that didn't

apply to you? You actually got yours from UCLA?

**Rosenblatt:** Well, yeah. No. I was fully a UCLA student. I got mine from UCLA. My

only connection with Scripps was that Carl Hubbs was on my doctoral

committee.

**Harkewicz:** Right. Well, since you mentioned Carl Hubbs again, was he your

supervisor then when you were working?

**Rosenblatt:** Well, that was very interesting because Carl Hubbs was sort of a force of

nature, a very vigorous, dominant man in American ichthyology. And so, when I came here I was—or when I sort of officially became the curator, I

really had to establish—in fact, he was not my supervisor, we were

<sup>6</sup> Roger Randall Dougan Revelle (1909 – 1991), SIO director 1951 – 1964.

<sup>&</sup>lt;sup>7</sup> Harold Clayton Urey (1893 – 1981), professor of chemistry at UCSD. Nuclear chemist whose discovery of heavy hydrogen won him the Nobel Prize in 1934.

<sup>&</sup>lt;sup>8</sup> James Richard Arnold (1923 - ), professor of chemistry and biochemistry at UCSD.

colleagues, and I managed to maintain my identity. And, some of Hubbs' colleagues, who knew him, told me that they wondered if I would manage to survive, and they thought it was great that I did.

**Harkewicz:** You said he was a "force of nature?"

**Rosenblatt:** Oh yeah. Very. Just a really dynamic man.

**Harkewicz:** How were you able to maintain your own identity, then?

**Rosenblatt:** Well, I had to stay sort of at arm's length for a while. For example, the job

came with an assistant, and Mrs. Hubbs<sup>9</sup>, who was part of the Hubbs team, called me up one day—and Carl's offices were in a different, his lab was in a different building from where the collection was—and he'd run out of alcohol. Well, I would have been perfectly happy to bring him over a jug

of alcohol, but I sent my assistant.

**Harkewicz:** I see.

**Rosenblatt:** Okay

**Harkewicz:** So, then were you your own supervisor at that point?

**Rosenblatt:** Well, I was a member of the research staff and really you're supervised by

your colleagues at the university because every two years you come up for

a merit review and your colleagues review you. So it's just, I mean,

similarly, I did join the faculty in 1965.

**Harkewicz:** All right.

**Rosenblatt:** I applied for and was offered a position at the University of Southern

California. And I came to see the director with a letter in my hand, and said, "Look, you offered me a position as an associate professor and I love it here, but I want to teach." And I, in fact I accepted a position as an

assistant professor here following that.

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<sup>&</sup>lt;sup>9</sup> Laura Clark Hubbs (1893 – 1988). Laura Hubbs received a master's degree in mathematics from Stanford University in 1916. She married Carl Hubbs in 1918 and worked as a cataloger in his laboratory at the University of Michigan from 1920 – 1944. While at Michigan, Laura Hubbs was a major partner in her husband's studies on fish hybridization. Due to nepotism laws at the University of California when Hubbs became a professor of biology at Scripps in 1944, Laura Hubbs could not be employed at the Institution. Instead she volunteered her time to work in her husband's laboratory and office. For thirty-five years, she was responsible for the majority of the statistical work for his publications while also keeping his scientific files and records. In addition, she participated in monthly field trips with her husband to take ocean temperature measurements and collect fishes and objects from early human cultures in Baja California. Laura Hubbs was co-author on nineteen of Carl Hubbs' publications. The Hubbs Research Center of the Sea World Research Institute was dedicated, in 1976, to both Carl and Laura Hubbs.

**Harkewicz:** I see. So, you liked it here so much that you preferred staying here even

with a lesser title, so to speak?

**Rosenblatt:** Well, what it meant was taking my chances that I would earn tenure here

versus being awarded it after one year at USC. So.

**Harkewicz:** When you called again, going back to Carl Hubbs, when you said he was a

"force of nature," is that what—. I know when you wrote about him for the *Coming of Age* Scripps booklet you referred to "Hubbsian." <sup>10</sup> Is that what

you mean when you called things: "things had a Hubbsian . . . . "

**Rosenblatt:** Yes. Absolutely. A Hubbsian energy.

**Harkewicz:** Okay. He had—he put his template on everything? Is that what you're

suggesting with that? Or . . .

**Rosenblatt:** Oh yes. He put his stamp on American ichthyology.

**Harkewicz:** I see. Okay. But, when you came here to curate the collections, were you

pretty much able to do things the way you saw that you had wanted to do?

**Rosenblatt:** Well, yeah. I was given the freedom to organize the collection, and always

under Mrs. Hubbs' watchful eye, since she really had run the collection at the University of Michigan. Hubbs had built this huge collection there. The collection, when I came here, was not in very good condition because they'd had a series of student helpers who had taken care of it and they just weren't able to give it the attention that they did in Michigan. So, I had a

lot of work to do that first year.

**Harkewicz:** Straightening things out?

**Rosenblatt:** Oh yeah, straightening things out, washing bottles, getting rid of

specimens that didn't have proper data, and so forth. And, sort of setting

up what the modern collection is.

**Harkewicz:** How did you get interested in the curatorial work?

**Rosenblatt:** Well, because I'm a systematist. That is one who studies species and their

relationships, and for that you—that's collection-based research. So every systematist in some sense is a curator. Some have big collections, and other just have their own private thing that they work on, but you have to

be able to do that.

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<sup>&</sup>lt;sup>10</sup> Robert L. Fisher, Edward D. Goldberg, and Charles S. Cox, editors. *Coming of Age: Scripps Institution of Oceanography, A Centennial Volume, 1903 – 2003.* (La Jolla, CA: Scripps Institution of Oceanography, University of California, San Diego, 2003). Chapter on Carl Leavitt Hubbs written by Richard H. Rosenblatt, pages 45 – 55.

**Harkewicz:** Were you able to do research yourself on the collections then?

**Rosenblatt:** Oh sure. Yeah, this was a professional research position. It was not just a

caretaker of the collection. In fact, I've always had a full-time assistant since—for many years, had two people as curatorial assistants in the

collection to do the cataloguing and so forth.

**Harkewicz:** And then, are the collections available for researchers then to use also?

**Rosenblatt:** Absolutely. That's what they're for. We've got about two million

specimens and 3,500 species of marine fish. And they're used by people

all over the world, not just by Scripps staff.

**Harkewicz:** Is there a continual exchange of stuff? Are you continually getting new

stuff?

**Rosenblatt:** Not so much anymore. The sort of glory days of building the collection

were from, oh, right before I came here up until maybe the late seventies. For one thing, there's very little collection of deep sea animals going on anymore, although from what went on in those years we've got one of the biggest collections of deep sea fish in the world. And then, we've got a very large collection of eastern tropical Pacific shore fishes, because partly that was my interest and partly because of geographic considerations. I probably put two million of the—or one and a half million of the two

million specimens—in the collection there through my efforts.

**Harkewicz:** Your works?

**Rosenblatt:** Yeah. I notice you'd had something down here about research cruises.

And, I ran a number of collecting trips to the Gulf of California, and was able to collect in Panama. And Carl Hubbs was also still really active in those days and he did a lot of deep sea fish collecting, and I did collect deep sea fish in the South China Sea, and the Indian Ocean. So we really

built the collection.

**Harkewicz:** Was that the Antipode Expedition?

**Rosenblatt:** In those years. And, I was part of Antipode, <sup>11</sup> yes.

<sup>11</sup> The Antipode Expedition took place from 16 June 1970 – 3 October 1971 on the R/V *Melville*. Antipode was the maiden cruise of the *Melville*. The cruise consisted of multiple legs with stops in many locations including: Tokyo, Manila, Mombasa, Singapore, Guam, Pago Pago, and Tonga. The cruise was a deep-sea geological-geophysical exploration of the western and northwester Pacific as well as the western and northern Indian oceans. Its goal was investigation of the sea-floor spreading hypothesis through the study of the age and movement of vast ocean bottom crustal masses. The expedition also surveyed sites for future deep sea drilling.

Harkewicz:

So, were those cruises, were they directed towards collecting, or was collecting just part of some other activities that were going on at this same time?

**Rosenblatt:** 

Well, the ones that I did, I was chief scientist on. Mostly, although back in 1959, right after I came here, I was able to go to the Gulf of California, sort of a supercargo on a trip that was headed by the geologist Francis Shepard. And my assistant and I went along in a small boat, or with a small boat. And in fact, that was an interesting trip because they put us ashore at Cape San Lucas for a week and it was Wheeler North, Connie Limbaugh, Jim Stewart<sup>13</sup>, lots of people who were well known.

**Harkewicz:** I see.

**Rosenblatt:** Subsequently.

**Harkewicz:** Were you doing collecting while you were actually on shore?

**Rosenblatt:** That was the purpose of leaving us there as a shore party. Later in the

cruise, Shepard would take the ship out to do geology surveying in the daytime, and we would go off on our small boat and collect fish, and then get back on the ship at night. And I got to go out to try to collect a coelacanth with John Isaacs<sup>14</sup> in the Indian Ocean, in the late seventies, which was kind of interesting. We had a nineteen foot Boston whaler, and we'd put it over the side every night off the *Melville*. There were three of us, all from Plymouth Marine Laboratory, and a grad student of mine named Doug Diener<sup>15</sup> and I would set lines. And then we would tend them all night. And come back to the ship in the morning and sleep, and then go

do it again. We never caught a coelacanth.

**Harkewicz:** Oh. Was that a strictly, was it for that the coelacanth that you went out at

night, or was that typical thing to go after?

**Rosenblatt:** No. That was strictly for a coelacanth. John Isaacs had organized this

expedition to catch a coelacanth, and I came along because he wanted somebody that would know what to do with a coelacanth once he caught it. I have seen to be it in the hall of it. And I had a great the coefficient of the hall of it.

it. John wanted to catch it just for the hell of it. And, I had a-we

<sup>12</sup> Francis Parker Shepard (1897 – 1985), professor of submarine geology at SIO. Shepard is known as the "father of marine geology" because he was the first to adopt marine geology as his primary scientific interest. He wrote the first textbook in the field, *Submarine Geology*.

<sup>&</sup>lt;sup>13</sup> Wheeler James North (1922 – 2002), professor of environmental science in Division of Engineering and Applied Science, California Institute of Technology. Conrad Limbaugh (1924 – 1960), marine biologist and chief diving officer at SIO, 1950 – 1960. Limbaugh was responsible for setting up the state-wide University of California program of instruction in skin-diving sciences. James Ronald Stewart (1927 - ), served as diving safety officer at SIO 1960 – 1991.

<sup>&</sup>lt;sup>14</sup> John Dove Isaacs (1913 – 1980), biological oceanographer at Scripps.

<sup>&</sup>lt;sup>15</sup> Douglas Robert Diener (1942 - ), marine biologist. Graduated from Scripps in 1976.

probably would have been able to keep one alive in a way that nobody has ever, had been able to do. Other people have tried. Because we were on a ship and we could put a pipe down and suck up deep water, which was cold. Everybody else had caught a coelacanth and brought it into shore, which was in warm water, and what do you know, they died. But the French, of course, would not let us fish for coelacanth in the Comoros, which they controlled at the time. They wouldn't even let us try and take pictures of them. John had a baited camera set up where you could—it would take flash pictures every ten minutes and it would attract things to the bait. They said that they were, their scientific experts had told them that the flashing of the cameras would inhibit the reproduction of the coelacanths. So we fished in other localities. And, we spent two weeks doing that.

**Harkewicz:** And, you never?

**Rosenblatt:** No. Never got one.

**Harkewicz:** Well, do you think you would have, if you had caught one, do you think

you would have kept it alive bringing it back here? I mean, would you try to keep it alive as long as possible, like in an aquarium-type situation?

**Rosenblatt:** Well that was sort of the, part of John's idea. My idea was a little different.

I had a series of experiments designed which would start it off with a healthy coelacanth and ended up taking tissues from a dead one.

**Harkewicz:** I see. So, what happens in that kind of a situation where you plan a whole

expedition or a whole cruise around something that doesn't happen?

**Rosenblatt:** Well, that's—as I learned to say from Cousteau's people when I was with

them, "C'est la vie scientifique."

**Harkewicz:** I guess that's the way it is.

**Rosenblatt:** But no, it was not wasted because we set, John's people set cameras, and

we set traps. So they've got lots of pictures of deepwater fish attracted to traps. We also, we collected some specimens, too. So it wasn't a waste.

**Harkewicz:** I guess that's a good thing about science. You might not find what you're

looking for, but you'll find something else.

**Rosenblatt:** That's right. There are other things there, yes.

**Harkewicz:** Well, as long as we're talking about the collections, I had a question

about—I know that several years ago there was a controversy surrounding

financial support for the Scripps collection?

**Rosenblatt:** 

Well, it wasn't a controversy. What happened was that the state legislature directed the university to cut the research budget by ten percent across the board. And, that amounted, at Scripps, to about a \$1,200,000 budget cut. And, in trying to deal with this the administration decided that they would have to stop supporting, among other things, would have to stop supporting the collections. And, sort of to my surprise, this produced a ground swell of support for the collections, not just on the part of the, for the scientific community here, but in the general community. People were able to realize more than I thought they would the importance of collections. I had always tried to sort of stay below the radar, figuring maybe if they didn't know I, we, were here they'd forget about us. [Laugh] But, to my surprise the collections turned out to have lots of support. And so far, they've survived.

Harkewicz: And when about, about what year was that, more or less, or how many

years ago would that have been?

**Rosenblatt:** Three years ago, I think.

Harkewicz: So that was really recent?

**Rosenblatt:** That this happened, yes.

Harkewicz: But, I know when Carl Hubbs and Martin Johnson first started the

> collection they had to convince Roger Revelle to actually set aside money and space for it. Did you know anything about that original setup and the

problems involved with that?

**Rosenblatt:** You mean with Hubbs convincing Revelle?

Harkewicz: Convincing Revelle, yes.

**Rosenblatt:** I don't know how he did it, except as I said, he was a force of nature.

> [Laugh] And, he was able to convince Revelle of the importance of it. And, there wasn't any money set aside. There were two positions which, or actually three positions, or two positions set up at the time. Because when I came down the collections were being administered by the Marine Biology Division. And, I remember, Claude ZoBell<sup>16</sup> was the chairman and he called me in and told me that I could have \$500 for the year, to support the collection. And, obviously, we did much better. I think the real piece of politics involved there was Bill Newman<sup>17</sup> and I getting the collections out from under the divisions. We convinced the administration

that the collections—you know, at this time, there was geology, there was

<sup>16</sup> Claude Ephraim ZoBell (1904 - 1989), professor of marine microbiology at SIO.

<sup>&</sup>lt;sup>17</sup> William Anderson Newman (1927 - ), professor of oceanography, Marine Biological Research Division (MBRD).

plankton, and the invertebrate, excuse me, benthic invertebrates, and fish—and these were institutional assets, not divisional. So we got put under the aegis of the director's office and we got much better treatment there than we ever would have.

**Harkewicz:** So that way everybody could use them?

**Rosenblatt:** From the division. Well everybody, of course, could use them. The idea

was they were institutional assets . . .

**Harkewicz:** Rather than under the division control?

**Rosenblatt:** That they shouldn't be locked away in divisions like that. First Jeff

Frautschy<sup>18</sup> who was first assistant director, and later Tom Collins<sup>19</sup> really

devoted a lot of support to the collections.

**Harkewicz:** Did you feel, when you first came here to be the curator, did you feel like

there was not much interest in the collection? I mean, did you feel like you

always had to fight to get things that you needed to support this?

**Rosenblatt:** Yes.

**Harkewicz:** But then you said that you were surprised that a few years ago that the

public was supporting it. So, was it always a struggle for you or did things

change over time?

**Rosenblatt:** No, as I say things changed when we came under the administration, in

general, rather than being in divisions. We became a lot more visible and also sort of gave a lot more access. I could go talk to an assistant director

rather than having to talk to a division head.

**Harkewicz:** I see. So, you didn't feel like the collection was always the poor stepchild

or something like that?

**Rosenblatt:** Not really.

**Harkewicz:** Eventually it was . . .

**Rosenblatt:** But, as I said I always had the feeling that if they didn't realize that they

had us we might be better off. [Laugh] Because, as it turned out there was a lot of money that ended up going to the collections, because a lot was

taken away.

**Harkewicz:** I see.

<sup>18</sup> Jeffery Dean Frautschy (1919 – 1993), marine geologist at SIO.

<sup>&</sup>lt;sup>19</sup> Collins had the overall responsibility for non-academic operations at SIO (excluding ships operations).

**Rosenblatt:** And, it really helped that originally those positions were set up as research

positions. A researcher's never been as powerful as a faculty member at Scripps. And then when Bill Newman was hired he was hired as a faculty member. Then I became a faculty member and that really helped, too. And that's one of the reasons that we've managed to see to it that the curatorial

positions have stayed faculty positions.

**Harkewicz:** So, that way you just feel like there's more power being on the faculty and

being a curator, then? You have more control of things?

**Rosenblatt:** Well, after all, as I mean I was a curator, all right, but remember I was also

a professor, and I was chairman of the department for two five-year terms.

So all these things helped.

**Harkewicz:** Well let's talk about both of those things. You mentioned you were the

chairman of the department and headed up the graduate program, too,

didn't you? Was that correct?

**Rosenblatt:** That's what . . .

**Harkewicz:** The chairman of the department would do.

**Rosenblatt:** Yeah. That's the graduate department.

**Harkewicz:** So tell me a little bit about that. Were you the main person that planned

the way the graduate school was run, or how did that work? What did it

mean to be chairman of the department?

**Rosenblatt:** Well, as chairman of the department you have got funds at your disposal.

You run the personnel, really. In other words, you are responsible for merit increases, promotions, and also hiring. And I know there are people here that view that, "Well, you know, that's just being a paper pusher," but believe me, it isn't. Because for example, we have a search committee of the faculty, and when you have a faculty vacancy, who you put on the search committee is going to be very important in determining how that search is going to go. And, in the same way—I won't say I ever did this—but when you're setting up a committee to do an evaluation for a merit increase, who you put on that ad hoc committee is very important. I've

often said I could set up an ad hoc committee here that wouldn't

recommend Jesus Christ as Pope. [Laughter]

**Harkewicz:** So, you're saying the person that sets up the committee has lots of control

of what—of who gets hired or who gets to stay on?

**Rosenblatt:** Yeah.

**Harkewicz:** Was that a position that you fell into or was it something you really

wanted, or that you worked for?

**Rosenblatt:** No. I hadn't worked for it and I didn't fall into it. I had been vice chairman

of the department. And in those days that was a more important position because the vice chairman actually ran the graduate student selections. Right now, sort of each curricular group does it for itself, and the curricular groups had responsibility but I was sort of the main filter. So I had a lot of work to do in taking care of the students. I was sort of like a dean of students when I was vice chair. So they had a chance to see me operate. So I think that's probably one of the reasons that I was asked to be

a chair of the department.

**Harkewicz:** Are you still the chair of the department?

**Rosenblatt:** Oh heavens, no. I'm an emeritus. No. No. I was chairman of the graduate

department from 1980 to '85, and then from 1990 to '95.

**Harkewicz:** I know that directly after the war Scripps was very into research and into

physical oceanography. Did you feel that as a problem at all when you were chairman of the department? Did you feel like they spent too much time, or energy, or money in research and not enough in instruction? Did

you ever have any tensions with that?

**Rosenblatt:** Yes. I certainly did.

**Harkewicz:** Would you care to tell us about that?

**Rosenblatt:** Well, I remember telling one curricular group, which had approached the

department and wanted the department to pay a number of researchers for teaching courses in their curricular group, and I said "Wait a minute fellas, we're paying about a million dollars a year salary to your curricular group for professors and you want us to pay researchers to teach your courses? Come on now." And, it's true that that is one power that a department chairman has, which is to assign teaching responsibilities. And I, in fact, once did, when the geologists decided that none of them wanted to teach the introductory geology course because they were teaching it for biologists and chemists and so forth and not geologists, so it wasn't worth their time. I told them, I said "Look, you go back and have another meeting and decide who's going to teach the course, because if you don't tell me who's going to teach the course I will tell you who's going to teach the course." And they managed to find somebody who would teach the

course.

**Harkewicz:** I suppose that put you on some people's bad side, though?

**Rosenblatt:** Oh, I think there were probably some people that appreciated that as well.

**Harkewicz:** Probably in different divisions though. Not in the same one?

**Rosenblatt:** Well, no. Maybe even within that division.

**Harkewicz:** Do you feel like they've come to a good balance between instruction and

research? Or, do you think there's still a struggle with that?

**Rosenblatt:** Well, I don't know. I've been out of it for a while. I know that they pay a

lot more attention to teaching now. They've got, in fact, a rule that every professor's supposed to teach one course, at least one course a year. I don't know how well that's working out, because you've got 214 students and about a hundred professors. It's kind of hard to find students if every one of them teaches a course every year. But, nevertheless they do have this rule. And it's true. It was hard to convince people that teaching was important, because if somebody was a major researcher and bringing in lots of money it didn't do any good when the chairman wrote his

lots of money it didn't do any good when the chairman wrote his recommendation letter to say that "This person has not been teaching." But

I'm sure that that is true in the Chemistry Department, and the Physics

Department, and every other department.

**Harkewicz:** But you said that you took an assistant professor job here rather than an

associate professor job at USC because you wanted to teach—

**Rosenblatt:** Yes.

**Harkewicz:** —so obviously teaching was important to you?

**Rosenblatt:** Yes. Yes it was. And when I—for many years I taught one lecture course

and then two seminars every year, plus having graduate students.

**Harkewicz:** Why do you think teaching was so important to you?

**Rosenblatt:** Well, maybe I like to hear myself talk. [Laughter]

**Harkewicz:** Well, actually I've heard students say that your ichthyology classes are

their favorite classes, the ones they remember the best.

**Rosenblatt:** I'll have to admit I've been told that. Because I really enjoyed telling

people about fish and letting them know how wonderful they are, and also inspiring them to do research on fish. I had, I think, thirty-six graduate students who got Ph.D.'s under me, and then these people have had other

students. And you know, it spreads out.

**Harkewicz:** I know you were a consultant for the Birch Aquarium?

**Rosenblatt:** Oh, at one time I was director of the Birch Aquarium. <sup>20</sup> I guess it would

be about maybe from—oh, I know when it was: '62 to '65.

**Harkewicz:** So how important is it to you to instruct the general public, then, about

fish and oceanography?

**Rosenblatt:** Well, I've always been happy to help the aquarium do it, but I don't regard

it as one of my major things. Although whenever somebody gets bitten by

a shark I have to go on television. [Laughter]

**Harkewicz:** So, it was more of an administrative position?

**Rosenblatt:** At the aquarium?

**Harkewicz:** Yeah. When you say "direct," I mean, did you get to have any control of

how the programs are set up?

**Rosenblatt:** Well, you have to remember the aquarium was totally different in those

days. I don't think they—it was this little building that was in the, what's now a big hole in the ground. And they really had a crisis there, and they came over and asked me if I would be director of the aquarium and that really meant trying to keep Sam Hinton<sup>21</sup> and Carr Tuthill<sup>22</sup> from each other's throats. And, that's what I did. And when Sam Hinton resigned, I went over and saw Fred Spiess<sup>23</sup> and I said, "Okay, you have an open position now and you're going to have to fill it with a professional

aquarium director because I quit."

**Harkewicz:** Sounds like you were the go-to man in a lot of situations?

**Rosenblatt:** Yeah. That's, I guess, true. And he said, "Well, okay, who should we

hire?" And, fortunately I knew someone who was a professional aquarist and I called him up and asked him if he would come here, because I knew

<sup>&</sup>lt;sup>20</sup>.The Birch Aquarium is located on the campus of the Scripps Institution of Oceanography, University of California, San Diego. The Birch Aquarium is the third aquarium and museum located on the Scripps campus. Scripps has operated an aquarium since it was founded in 1903. The Scripps Library Museum was in operation from 1915 to 1950, and the T. Wayland Vaughan Aquarium-Museum operated from 1951-1992. TheBirch Aquarium (named for its major donors, Steven and Mary Birch) opened in September, 1992.

<sup>&</sup>lt;sup>21</sup> Samuel Duffie Hinton (1917 – ), marine biologist and curator of T. Wayland Vaughan Aquarium-Museum at SIO from 1946 – 1965.

<sup>&</sup>lt;sup>22</sup> Carr Tuthill (d.1984), museum preparator and aquarist, T. Wayland Vaughan Aquarium-Museum at SIO.

<sup>&</sup>lt;sup>23</sup> Fred Noel Spiess (1919 - ), professor of oceanography at SIO. Spiess served as associate director of Scripps and director of the Marine Physical Laboratory. He also served as acting director of SIO from 1961 – 1963 while then director Roger Revelle was in Washington, D.C. acting as the first science advisor to John F. Kennedy's Secretary of the Interior, Stuart Udall.

that if I was going to get out of that job I had to give them somebody to be in it.

**Harkewicz:** Get somebody to take over for you? Yeah.

**Rosenblatt:** So that's how Don Wilkie<sup>24</sup> came here to be director of the aquarium for

twenty-some-odd years.

**Harkewicz:** Were you still curating the collection then at the time that you were

directing the aquarium?

**Rosenblatt:** Oh yeah. Yeah, I was curator, and researcher, and trying to run the

aquarium and not doing a really good job of it.

**Harkewicz:** What I understand, though, someone told me that the collection is like

your baby, or your pride and joy. Can you say anything about that?

**Rosenblatt:** Well, yeah. I've spent four years of my life building that collection and it's

one of the most important collections in the world. And, along with my graduate students it's going to be my legacy to science. As well as my

papers. I mean, I have done research along the line.

**Harkewicz:** That brings up an interesting point, too, though. I know that, you know, in

science when somebody uses your paper they have to cite your paper, obviously. There's nothing like that for a collection, or is there? I mean

they have to cite the collection that they used, but . . .

**Rosenblatt:** Oh, absolutely. Yeah. They cite the collection. As a matter of fact, we

have a list of all the papers that have been published using the collection. And this sort of information is invaluable if you want to get money. And, we got a grant of some, just under \$300,000 to put compactors in the collection, and it was because we were able to show this sort of use of the collection: number of loans we make, the numbers of papers that have

been written on material from the collection.

**Harkewicz:** But you personally probably don't get credit for that, do you? I mean,

unless people know that you were the curator at the time?

**Rosenblatt:** Someday some historian of science will write a paper about collection

builders of the late 20<sup>th</sup> century, and maybe I'll be there. [Laughter]

**Harkewicz:** Okay. I'll do my best to see if I can do something about that. Now, I also

heard that you were an avid scuba diver in your earlier career, but I also understand that people like Carl Hubbs never learned how to scuba dive.

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<sup>&</sup>lt;sup>24</sup> Donald W. Wilkie (1931 - ), marine biologist, director emeritus of Birch Aquarium.

And I wonder if that created any kind of difficulties between the people that did dive and those who didn't. I mean, if that affected research at all?

**Rosenblatt:** 

No, not a bit. In fact, I mean, my diving was, of course, involved with collecting fish. That was the major way that I did it, was by spreading on them and picking up the dead fish. No, in 1962 I went down to Baja California with Carl Hubbs to Baya de Los Angeles and I was a little concerned. I wasn't sure that Baja California would be big enough for the two of us. But anyway, it worked out very well because we had enough people that Carl had a sort of shore-bound crew and they would go beach seining and go on that sort of thing. And then I would take a crew out every day and we would go scuba diving and collect fish. It complimented each other very well.

Harkewicz:

But, why was it that he or some of the older people didn't bother learning how to dive?

**Rosenblatt:** 

Well, I'm not sure Carl wouldn't have liked to do it, but Connie Limbaugh, who was the person that established the diving program at Scripps—and now we get something that you have to know where the bodies are buried—they told Carl that he was too old. He was almost fifty. But, that wasn't the reason. The real reason, Connie told me, was that he did not trust Hubbs not to kill himself because he knew that if Hubbs was running out of air and he saw some fish that he hadn't seen before that he would drown before he would give up trying to catch that fish.

Harkewicz:

Okay.

**Rosenblatt:** 

In other words, this sort of dogged determination that Hubbs had was not good for scuba diving.

Harkewicz:

I see. Well, that makes sense. But, how did scuba diving change oceanography or change marine biology?

**Rosenblatt:** 

Oh, infinitely. I'll go back to my first attempt at scuba diving. This was when I was still a graduate student at UCLA. A friend of mine and I built our own regulators. We actually made them, and we adapted them from a—. We went to the war surplus store and got a demand valve that they had used in oxygen systems in bombers, and replaced the cloth diaphragm with a rubber diaphragm, reset the high pressure valve, put silicon grease on all the screws, got, again from the war surplus store, gas mask hoses—and I won't go through the whole thing—but we actually made our own regulators. And I remember the first time I went under water off Palos Verdes, and went down. And, instead of coming back up I took a breath and I didn't have to go back up and I could see things I'd never seen

<sup>&</sup>lt;sup>25</sup> What Rosenblatt used to kill fish is inaudible on the tape.

before. And, I mean that's what scuba diving has done for underwater, for marine science. It just opened up whole new worlds. I mean, you're down collecting fishes in eighty, ninety, a hundred feet of water. ##

**Harkewicz**: ## Okay, so you just were describing your first scuba experience...

**Rosenblatt** Everybody takes scuba diving for granted now.

**Harkewicz:** Yeah, you're right.

**Rosenblatt:** But you can imagine what it was like to have it suddenly become

available, for marine geology too.

**Harkewicz:** It opened up entirely new worlds?

Rosenblatt: Yeah.

**Harkewicz:** Well, here's a question for you or something you can comment on. I

recently interviewed John McGowan<sup>26</sup> and he felt that scuba really isn't a very good oceanographic tool because there's too much prep time and too much cleanup time and then you're only down there for like a half an hour, or something like that. At least, that's what he said. So, I wonder what you

have, what you think of that?

**Rosenblatt:** Well, that's like saying that NASA's research program isn't worth anything

because you have to spend years and years building a rocket ship and then sending it up there, and then, gee, then it's only up there a week, or the Hubble telescope's up there a few years and then it's going to crash down

again. That's just—he doesn't do it.

**Harkewicz:** Okay.

**Rosenblatt:** Okay?

**Harkewicz:** But is that a common discussion?

**Rosenblatt:** No.

**Harkewicz:** No?

**Rosenblatt:** No. No.

**Harkewicz:** Most people would think that it's an excellent tool for . . .

<sup>26</sup> John McGowan (1924 - ), professor of biological oceanography at SIO. For more information see Oral History interview with McGowan on eScholarship Repository website: <a href="http://repositories.cdlib.org/escholarship/">http://repositories.cdlib.org/escholarship/</a>.

**Rosenblatt:** That's only John.

**Harkewicz:** Okay.

**Rosenblatt:** As you must have heard, John doesn't like anything. [Laughter]

**Harkewicz:** Well, I mean we don't need to get off into any personal attacks...unless

you want to.

**Rosenblatt:** No, I don't want to get off on him.

form a connection.

**Harkewicz:** Let's see.

**Rosenblatt:** But, I regard somebody saying that scuba diving is not important to

marine science as a personal attack. [Laugh]

**Harkewicz:** Well, I can understand that. Now, I know that you're interested in

biogeography and I was wondering if you could maybe explain what that is and a little bit of the kind of research that you've done along that line?

**Rosenblatt:** Oh boy. Well, that's—you're going to have to start a new tape. Of course,

biogeography is simply trying to explain the distribution patterns that we see on earth in terms of: one, present-day ecology, but also history. And, so when you're a systematist you're studying patterns of distribution. I mean, your fish are here and here and is this one related? How is this one related to that one? And then, how did this come about? And, so I've done a lot of work in the area of island biogeography, studying the fishes of the Galapagos Islands, and the off-shore islands of the Eastern Pacific.

And one of the things that I was interested in was the relationship between the fishes of the Eastern Pacific and the Western Pacific. You know, they've got this tremendous big fauna out there of all those wonderful tropical fishes, and you've got quite different fauna here. And why aren't they here? Well, part of it's because of different ecological conditions, but part of it's historical, too. I mean, there's a great big area with no islands in between, what Eckman called the East Pacific Barrier. But then, we have species that are in common between the two of them, and one very great controversy in biogeography was between people that believed in dispersal, and then what are called vicariance biogeographers. They think you have to explain everything in terms of motion of the earth's plates and

So there were two reasons that you could have had these fish over here in the Eastern Pacific from the Western Pacific. One of them was that they were coming over on ocean currents. And the other one was that actually they had been in—that many of these fish had been here and then lots of

them had become extinct. Remember, at one time, way back in the Cretaceous there was a, or somewhat up to the Miocene, there was a kind of a big fauna across the earth, the Tethys fauna, and so the vicariance biogeographers said that, "Well yeah, but dispersal doesn't explain anything really." You can't test it. It's sort of like intelligent design. You just say, "Well, things get spread around by accident and that's what we're seeing." And I always believed in dispersal myself. Then I—something that certainly was not true when I started off my career was that there turned out to be a way to test this, I decided, that we now had some genetic tools available. And that's the big change that happened in my lifetime as an ichthyologist. When I was doing my thesis work was just about the time when Watson and Crick were decoding DNA, but that still didn't help. We were using morphology and saying, "Well, the animal's morphology obviously is produced by its genes, so we're looking at the genes, maybe two steps, three steps removed."

Harkewicz:

By looking at what they looked like?

**Rosenblatt:** 

From the gene by looking at the morphology. But, then you began to be able to look at the genes directly through something called protein electrophoresis. And, if you could, when you could do that you could look at the differences and put a time element in it, what's called the molecular clock. So, at least for fish I did really the first test of the vicariance versus dispersal hypothesis because a grad student and I got some specimens from the West Pacific and then we had had specimens from the East Pacific of these species, and looked at them. And, it turned out they were genetically different, which indicated, in fact—excuse me, they were not genetically different. Did I say they were?

Harkewicz:

Yes, you did.

**Rosenblatt:** 

No. I'm sorry. They were not genetically different which means they couldn't have been separated for millions of years, these populations. But, we also showed that if you looked at some of the worldwide species from the Atlantic, versus the Eastern Pacific, that they were genetically different. Now, there we knew that they had been separated for about three million years by the isthmus of Panama. So, here you could say that, "Yes, vicariance caused that species, that difference, but that without land as a barrier dispersal was responsible for why these fish were in the Eastern Pacific." So, that sort of thing's been done since and it's been done better because now you can use mitochondrial DNA. You can look at the gene sequences, which you couldn't do then. You were looking at gene products, but you weren't looking at gene sequences. You had to presume that the difference in the gene product you were looking at was the product of differences in sequences, but you didn't know whether there

had been two, three, one substitution producing the different electrophoretic patterns you were looking at.

Harkewicz:

I think I remember reading something about being able to see climatic changes through biogeography? Is that correct, or am I mistaken? I know, I thought I saw a reference somewhere... something like El Niño has effects on species, even the way that they actually changed?

**Rosenblatt:** 

Oh, well, what it does is, for example, when we have an El Niño we get an influx of tropical species here. The last big El Niño we had, the '92-'93 one, Bob Lea<sup>27</sup> and I published a paper where we documented eleven species that never appeared in California before.<sup>28</sup> And every once in a while one of these things is going to take, and start a reproductive population, but it'll be cut off from what's going on down south. So, you could get speciation caused that way.

Harkewicz:

Do you think the same would be true of something like global warming, then?

**Rosenblatt:** 

Oh, it is absolutely going to be true of global warming, because the big population break, in California, is at Point Conception where you've got a boreal, or colder water, fauna up to there and then there's an abrupt change because the land goes away and the cold California Current keeps going south. And then you, the tropical species get up—not tropical, but the subtropical species get up that far. And so we know that if things get warmer they're going to move up, and the other species are going to be, are going to have to move north. It won't be as dramatic as what you'll see on land, of course, because you've got something that's sort of continuous, and you don't have things like arctic animals living on mountaintops that are just going to disappear all together.

Harkewicz:

Well, then, from what you were saying, I was wondering what you thought about the recently established Center for Marine Genomics? It sounds from what you're talking about the electrophoresis that that would seem like a good thing for Scripps to be involved in. But I wonder if, how you feel about it, is that the kind of work you think Scripps should be doing?

**Rosenblatt:** 

Absolutely. You know, as I said, I started off using counting fin rays and scales and looking at color patterns, and I still do that because you can tell species apart that way. And, for most species of fish that's the way we're going to tell them apart forever. But then along came electrophoresis, so I started doing that along with students. And I leaned how to do that. And

<sup>27</sup> Robert N. Lea, California Department of Fish and Game.

<sup>&</sup>lt;sup>28</sup> R. N Lea. and R. H. Rosenblatt "The Cortez Grunt (*Haemulon-Flaviguttatum*) Recorded from 2 Embayments in Southern California." *California Fish and Game*, 1992 (Fall) 78.4: 163 – 165.

then about the time that molecular genetics came along I decided that probably I wasn't going to learn how to do that for myself because I was getting too old. And I've done work in that area, but with collaborators. And I've had students doing that sort of work. But you know, there's just the progression that goes along, and there are so many things that you can understand if you can do sequencing and look at the genetics behind things.

**Harkewicz:** So, you don't think it's just a fashionable thing that people are involved in

because everybody's into genomics and stuff like that?

**Rosenblatt:** Everybody's in genomics because it's so important.

**Harkewicz:** Okay. So, what do you think has been the biggest change in

oceanography, or molecular biology, in the time that you've been here?

You were here for forty, fifty years?

**Rosenblatt:** Well, I just said that.

**Harkewicz:** The genetic changes?

**Rosenblatt:** Yeah. Understanding the genetic basis for the distributions we see, for the

differences in the animals that we see, and their physiology.

**Harkewicz:** To take a sort of different tack here, in relation to Scripps as a community

or more of a social place—have things changed as far as you can tell from

when you first started here?

**Rosenblatt:** You know, I've always had the feeling that people think that there's some

big sort of social group, and social activities going on here that they're

being left out of, and everybody feels that way.

**Harkewicz:** So, you don't really think there was?

**Rosenblatt:** Yeah. Well, of course, yeah, things have changed a lot. I mean, when I

first came here Scripps had a reputation for wife swapping and so forth. And I think, well there was sort of two things operating. One was that, even when I first came down here, say in '54, to work that summer, this was really a pretty isolated place. There wasn't anything in San Diego anyway, and there was La Jolla, and lots of the grad students married secretaries here. And I guess if you wanted to have an affair it probably

would be with a colleague's wife. [Laugh]

**Harkewicz:** That's true. Sort of like your own little island, I guess, isn't it?

**Rosenblatt:** That's right. And people were intensely interested, maybe, in each other.

Now, I mean, we're a big place. We're living in a big city. And I don't think people expect, really, to find their socializing right within this

community.

**Harkewicz:** Did you live around here when you first moved here? In the La Jolla area?

Or?

**Rosenblatt:** No. Well, actually, I lived in Pacific Beach up until 1960, and then bought

a house up in Clairemont. And I still remember when the Nierenbergs<sup>29</sup> came here and, of course, bought a house in La Jolla. And my wife was talking to Edie Nierenberg and Edie asked her where we lived, and she, Barbara,<sup>30</sup> said, "In Clairemont." And Edie said, "Oh, why would you live in Clairemont?" And, Barbara said, "Because the weather's so much better

there." [Laugh] Which it is. Also, there was a lot of that kind of

snobbishness. And, Don Wilkie's wife,<sup>31</sup> they were very happy that they had actually been able to live in La Jolla, that they had bought a house in Bird Rock. She was talking to Jean ZoBell<sup>32</sup>, who asked her where she lived, and she said, you know, "Bird Rock." And she said, "Oh. Baja La

Jolla?" [Laughter]

**Harkewicz:** I see.

**Rosenblatt:** So no, I've never lived in La Jolla.

**Harkewicz:** Did any of that kind of stylishness fall over into research activities at all?

**Rosenblatt:** Absolutely not. No. It didn't have anything to do with anything. I have—

anyway, I went from Clairemont to Pacific Beach, and I still live there. I

tell people, "I've never been able to afford to live in La Jolla."

**Harkewicz:** Well, I was walking around here this afternoon and everything's pretty

close together, that's for sure, so you probably have more land out in

Clairemont than you would in La Jolla, anyway.

**Rosenblatt:** Hmm. Well, I don't know. Remember there's a lot of different La Jollas.

**Harkewicz:** You're right. Exactly.

<sup>29</sup> Edith Myerson Nierenberg and William Aaron Nierenberg (1919 – 2000). William Nierenberg was SIO director 1965 to 1986. He and Edith were married in 1941.

<sup>&</sup>lt;sup>30</sup> Barbara Rosenblatt (1931 – 1985). Married to Richard Rosenblatt in 1952.

<sup>&</sup>lt;sup>31</sup> See note 23. Wilkie is director emeritus of the Birch Aquarium and former director of the T. Wayland Vaughan Aquarium-Museum. Wilkie married in 1955.

<sup>&</sup>lt;sup>32</sup> Jean Elliott Switzer ZoBell (1919 - ). ZoBell married Scripps professor of marine microbiology Claude Ephraim ZoBell (1901 – 1983) in 1946. She was an unpaid research assistant in his laboratory at SIO. Jean ZoBell accompanied her husband on the 1960 NAGA Expedition to the South China Sea, the 1964 DODO Expedition to the Philippine and Mariana Trenches, and the 1966 Deepac Expedition to the Japan-Bonin Trench.

**Rosenblatt:** You go up into the Muirlands and there's plenty of land up there.

**Harkewicz:** Well also, in terms of—I don't know if you want to call it this

community—but I, you know, there was more of an emphasis, at least again in the postwar period, on physical oceanography rather than biological oceanography? Did you feel any of that kind of conflict at all?

Did that affect your work at all?

**Rosenblatt:** No. It certainly didn't affect my work. It's always been true there's been

more money available in physical oceanography than in biological

oceanography. And one of the reasons, actually one of the reasons for that, of course, is that they use a lot more ship time, which is expensive, and their instrumentation used to be a lot more expensive. And I would say it isn't now. And you know, when you start looking at sequencers and

electron microscopes and so forth. So . . .

**Harkewicz:** The biological stuff is getting caught up as far as price-wise? But you

didn't feel directly that there was some kind of . . .

**Rosenblatt:** Well, yeah, there was always—you could just look at the distribution of

students and faculty and see that half the students were in biology, and

probably half the faculty was in physical oceanography.

**Harkewicz:** I see. Did the physical oceanographers use the collections as well?

**Rosenblatt:** No.

**Harkewicz:** No?

**Rosenblatt:** Absolutely not. I can't think of any reason.

**Harkewicz:** Do you think that also affected the fact that money always seemed tight

with keeping up the collection?

**Rosenblatt:** I don't think there was any direct connection there.

**Harkewicz:** Okay. I know a lot of people talk about the sixties being like the "golden

age of oceanography," and I wondered if you had any thoughts about that?

**Rosenblatt:** Oh, absolutely. That was, as I say, when we were out there building the

collection, you could get ship time, you could get NSF<sup>33</sup> support for collecting-based activities. Yeah. And things have gotten succeedingly tighter and tighter and tighter, and ships have gotten more and more and

<sup>&</sup>lt;sup>33</sup> National Science Foundation

more expensive. You know, when I think about what my work would be worth, it would be \$25,000 a day, which is what the *Revelle* costs.<sup>34</sup>

**Harkewicz:** What would you answer? Is your work worth \$25,000?

**Rosenblatt:** No. It was probably worth the \$1,500 a day it cost when I was using ships.

**Harkewicz:** Were you involved in grant writing? Did that change over time? You said

there was a lot more money available in the postwar period? What's

happened since then?

**Rosenblatt:** Well, partly because of our own activities, the competition's gotten tough.

You know, we keep cranking out students and there they are competing

with you for dollars.

**Harkewicz:** And Scripps can't rest on it laurels or something and say that "We have

this history that would warrant us getting more money in any respect?"

**Rosenblatt:** Well, I don't know if you know the expression, "What have you done for

me lately?" It probably helps. I mean, it doesn't hurt to be applying from

Scripps rather than from San Diego State.

**Harkewicz:** You've been here for quite a long time, so what do you think made Scripps

successful in your timeframe? What do you think is the main reason for

Scripps' success?

**Rosenblatt:** A good job at recruiting. I mean, it's all people, and if you have, if you

recruit first-class people you've got a first-class institution.

**Harkewicz:** So that goes back to what you were talking about when you were

chairman, and who you put on the committees?

**Rosenblatt:** Yeah, but it means of course you've got to have institutional support. And

it builds on itself because if you've got good people then good people want to come here and it's easier to recruit good people. And, as I say, given an institutional base, which is of course essential, then whether you succeed as an academic institution or not is going to depend on the people you

recruit and then your standards for promotion.

**Harkewicz:** So, do you think that not hiring good people threatens Scripps' success? I

mean, what do you think is the thing that might threaten Scripps' success

the most?

**Rosenblatt:** I would say erosion of the institutional base. In other words, if we can no

longer add facilities, build buildings, have money for matching grants. I

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<sup>&</sup>lt;sup>34</sup> In 2006 dollars.

mean, you've got to have that, too. And that's what I've seen, a continuous erosion of the institutional base by the University of California.

**Harkewicz:** Does the affiliation with UCSD have anything to do with that?

**Rosenblatt:** Well, there's been a really serious diminishing of the university support for

research. And, it doesn't just affect Scripps. You know, if you look at what Davis' agricultural departments have contributed to the State of California, and then the State turns around and cuts their budget ten percent? So, it isn't just at Scripps. But the university has—it goes back, of course, to the legislature and the university. But the universities also have this feeling, and probably coming from the Regents, that the really important thing is to educate undergraduates. That is diminishing the university's historic role as a research institution. And you can't keep doing it just with outside funds. You've got to have a foundation to build

on.

**Harkewicz:** In your time here, you think it's gotten worse?

**Rosenblatt:** It's objectively gotten worse, there's no doubt of that.

**Harkewicz:** And, it's mostly because of their focus on undergraduate education?

**Rosenblatt:** Well, they're feeling that if they don't fulfill that obligation, of course, the

legislature's really going to turn on them. And, maybe the university's not doing a good enough job of educating the legislature as to the important

role of UC in the state.

**Harkewicz:** Have you taught any undergraduates in your career? Or, has it all been

basically graduate students?

**Rosenblatt:** Well, it's mostly graduate students, although I've had, I would always let

undergraduates into my class. And at times, half of the students in my fish course would be undergraduates. And some of them did really well. But, there's a big difference between teaching—and of course, I was a TA., so I got to know undergraduates then. And there's a big difference between teaching graduate students and undergraduates. Never had a graduate student come and tell me that he had to miss the midterm because a buddy's car ran out of gas. And then when they went out to put the gas in

it they had a flat tire. [Laugh]

**Harkewicz:** I suppose you have some good stories?

**Rosenblatt:** Oh, yeah.

Harkewicz: You know, Scripps is looking for a new director, and I wondered if you

had any thoughts about what kind of a person they should be looking for.

**Rosenblatt:** Well, yes. We want a brilliant scientist who will take us off in new

directions, bring in lots and lots of money from private sources, and be a

wonderful administrator.

Harkewicz: That sounds like a wish list. Some people complain about the fact that, in

> the past, there's been a lot of physicists as director, and that maybe that was not appropriate, or the best choice for Scripps. So, I wonder if you

had any thoughts?

Rosenblatt: Well, I was on one of the director search committees, so, one of them

> which produced another plasma physicist. I'm sure there must be another one out there that's looking for a job, and they'll probably find him. You

want to know why I think we've had physicists?

Harkewicz: Sure.

**Rosenblatt:** Well, the thing that hit me when they put me on the search committee was

that maybe one of the reasons we've never had an oceanographer or

somebody from inside, since Revelle, was that people in the

oceanographic community, or inside, who are sort of illustrious enough to be available to be director of Scripps, probably made just enough enemies that there's always somebody there who's going to say, "Oh no. You're not going to hire him." And, I think that was part of it, because as I say, as I watched as we knocked down the list of people who had applied when I was on the search committee and we came out with sort of a compromise candidate and this was somebody who, yes, had been in the oceanographic community somewhat but not so much they'd stepped on too many toes. And so they could be suitable in some way, and they just turned out to be

a physicist.

Harkewicz: I don't suppose you could answer whether that might be unique to Scripps

or if you think that might be the case elsewhere?

I'm sure it's the case elsewhere. **Rosenblatt:** 

Harkewicz: So what kind of things are you doing right now?

Well, actually I'm still doing committees, some committee work. They **Rosenblatt:** 

tapped me to be head of the Heritage Committee, <sup>35</sup> and what I'm mainly

<sup>&</sup>lt;sup>35</sup> The Scripps Heritage Committee is a watchdog group charged with maintaining the historical integrity of the George H. Scripps Memorial Marine Laboratory Building, a National Historic Landmark, and any future buildings with historic designations. The committee also serves as consultants on historical matters pertaining to Scripps, such as recommendations for storage or display of material artifacts related to marine science history. In addition,

trying to do is finish off some papers that I should have written during the rest of my career.

**Harkewicz:** Do you come in and do anything with the collections anymore, or the

people that are managing them now?

**Rosenblatt:** Yeah. Yeah. I'm still—I've got an office, and I come in just about every

day. And I don't want to interfere with Phil Hastings<sup>36</sup> running the collection, but I still stick my oar in from time to time. To help him

identify things, and so forth

**Harkewicz:** Well, you're the expert. With your two million additions to the collection.

I guess have a few things you can say. You told me that you wanted to talk about the administration, because you spent a lot of time there. Did we

cover what you wanted to say, you think?

**Rosenblatt:** Yeah. I think we probably talked enough about that.

**Harkewicz:** Anything you want to add about teaching or the collections, or anything

else that you feel you want to have down for posterity?

**Rosenblatt:** Well, since your number three item here is, "What Scripps meant to you?"

it meant the absolute freedom to do as much as I could and make myself

whatever I could. [Laugh]

**Harkewicz:** So you think you were able to do things here that you might not have been

able to do elsewhere?

**Rosenblatt:** Well, I don't know what I would have done elsewhere. But this is, for

somebody with my interest, this has been an absolute ideal place, and I've

had a great life here.

**Harkewicz:** Great. Well, thank you for talking with me and I appreciate your

participating in the project. ##

the committee provides a history-oriented focus for the marine science portion of UCSD and administers the income from the fund provided by Mr. and Mrs. Robert Cody, which is used to award the William E. and Mary B. Ritter Fellowship. The Ritter Fellowship is aimed at encouraging work in the history of the ocean sciences. Rosenblatt is chair of the Heritage Committee for 2005 - 2006.

<sup>&</sup>lt;sup>36</sup> Philip A. Hastings (1951 - ) professor of marine biology, curator of marine vertebrates, SIO.

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