Ronald Dubner describes the process of discovery

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JOHN LIEBESKIND: Well, little ones here and there. But I want to ask one now, that I think maybe relates here, because it's one of the ones I had written on the plane. I mean, you know, your lab is characterized now, here, 1994, you know, your lab, as you look back over it, is characterized by all these different kinds of studies and different techniques you brought to bear.

RONALD DUBNER: Well, we can get into that.

LIEBESKIND: Well, we're going to. I'm not trying to jump over it. I just want to say, as I hear you, I hear a sense of excitement about these behavioral studies and I'm just wondering -- Maybe I should wait until the end to ask this, but I was just wanting to ask you, you know, as you look back now over all these different kinds of studies, are there one or two studies that particularly excited you and that, you know, that you look back on with special fondness or something as being especially interesting?

DUBNER: Well, I think the most -- I think these were some of the most exciting experiments that I ever did, and that was recording from neurons in the awake behaving monkey.

LIEBESKIND: In the awake behaving. I mean, that's what I was getting a sense of, that's why I asked you.

DUBNER: This was the most exciting discovery, I think, that I ever was involved in my career. I think the MT studies were very exciting, too, because we came on this area that no one else had -- knew what was going on and the -- You know, what's most exciting in science is when you come upon a discovery, that is like taking candy from a baby. In other words, there are some studies you do that are difficult. You get some exciting data, but it's -- you know, you have to really -- It's like pulling teeth sometimes, but you do get some exciting data. But the awake monkey experiments was like taking candy from a baby, because the neurons just -- they just shouted at us. They just shouted at us and said, "Look what we can do in the awake behaving animal – organism, the awake organism. Look how our activity can be modulated by the environment, by the environmental cues, and by the relevance of the stimulus to the behavior." And this was very, very exciting. The MT discovery was also like taking candy from a baby.

LIEBESKIND: A similar thing, yeah.

DUBNER: We went into this area and it just started shouting out at us about what the function of this area was. So that was very exciting. I think the other thing that was exciting was -- but

other people had shown it before, was the expansion of the receptor fields that we found after injury. You see? And then -- You know, other people had shown that.

And then the -- Well, we're getting ahead of our story, but the work that we've done in the lab with -- the molecular work with dynorphin, gene expression. That's very exciting. And that – But of course, the most exciting things you do are the ones that you really have your hands into. And my hands were really into the MT studies and into the awake behaving monkey studies.

LIEBESKIND: And now your lab is so big you've got these different people –

DUBNER: In a lot of the subsequent studies, the lab got bigger and other people were at the bench, and I was involved in the network, but writing the papers and talking about it on a day-to-day basis, but it wasn't -- I wasn't -- My hands were not wet or dirty.

LIEBESKIND: Right, right. I understand.

DUBNER: But they were in the monkey experiments.

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