

Goldstein Combined 01 FINAL PLAYED

Goldstein, Daniel 11-16-2017
Goldstein, Daniel 11-17-2017

[REDACTED]

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9:24 - 10:1	Goldstein, Daniel 11-16-2017 (00:00:10)	DG01.1
	9:24 THE VIDEOGRAPHER: Would the court 9:25 reporter please swear in the witness?	
11:4 - 12:5	Goldstein, Daniel 11-16-2017 (00:01:03)	DG01.2
	11:4 Q. Good morning. As you just heard, my 11:5 name is Pedram Esfandiary, I represent the 11:6 Plaintiffs in this action.	
	11:7 Could you please state and spell your 11:8 full name for the record, sir?	
	11:9 A. It's Daniel A. Goldstein, 11:10 G-o-l-d-s-t-e-i-n.	
	11:11 Q. Great. And you understand that you 11:12 are under oath, right, Mr. Goldstein?	
	11:13 A. I do.	
	11:14 Q. What's your understanding of that 11:15 oath?	
	11:16 A. My understanding is that I am sworn 11:17 to tell the truth to the best of my knowledge.	
	11:18 Q. And what is your current position at 11:19 Monsanto?	
	11:20 A. I am a Distinguished Science Fellow 11:21 and Lead for Medical Sciences and Outreach at 11:22 Monsanto.	
	11:23 Q. What does that mean?	
	11:24 A. It means I serve several roles 11:25 internally as a scientist. It means I have 12:1 responsibility in my own particular case for 12:2 product safety across all of our various product 12:3 lines, and I am also involved in outreach and 12:4 communications, primarily to medical and 12:5 professional organizations regarding our products.	
12:19 - 13:10	Goldstein, Daniel 11-16-2017 (00:00:44)	DG01.3
	12:19 Q. (BY MR. ESFANDIARY) Okay. What 12:20 training or education do you have that allows you 12:21 to hold the position that you currently hold at 12:22 Monsanto?	
	12:23 A. I have an undergraduate degree in 12:24 molecular biology from the University of Wisconsin. 12:25 I did graduate work there in the field of genetics	

13:1 but did not receive a graduate degree. Instead I
 13:2 went on to medical school, Johns Hopkins
 13:3 University, completed a residency in pediatrics at
 13:4 Johns Hopkins and then moved on to Sick Children's
 13:5 Hospital in Toronto, where I did a fellowship in
 13:6 clinical pharmacology and toxicology.

13:7 Q. So you do have specific training with
 13:8 respect to toxicology?

13:9 A. I have training specific to medical
 13:10 toxicology. That is correct.

13:18 - 14:1

Goldstein, Daniel 11-16-2017 (00:00:21)

DG01.4

13:18 Q. Okay. And do you have any training
 13:19 as it relates to epidemiology?

13:20 A. I have a great deal of training as to
 13:21 epidemiology and statistics, but I do not consider
 13:22 myself to be an epidemiologist per se.

13:23 Q. Okay. You understand that Monsanto
 13:24 has selected you to represent the company for the
 13:25 purposes of this deposition; correct?

14:1 A. Yes.

240:1 - 240:5

Goldstein, Daniel 11-16-2017 (00:00:15)

DG01.5

240:1 Q. (BY MR. ESFANDIARY) But you do agree
 240:2 with me, Doctor, that there are currently numerous
 240:3 epidemiological studies demonstrating statistically
 240:4 significant elevated risks between Roundup exposure
 240:5 and the onset of non-Hodgkin's lymphoma; correct?

240:11 - 240:19

Goldstein, Daniel 11-16-2017 (00:00:30)

DG01.6

240:11 A. There are a number of studies that
 240:12 have suggested a possible statistical association.
 240:13 They are weak in their design. They are weak in
 240:14 their exposure metrics, and the experimental
 240:15 system, or the epidemiologic study I should say
 240:16 that has the best experimental design, which is the
 240:17 Agricultural Health Study, has not been able to
 240:18 demonstrate a relationship between glyphosate
 240:19 exposure and any type of malignancy.

242:14 - 242:18

Goldstein, Daniel 11-16-2017 (00:00:16)

DG01.7

242:14 Dr. Goldstein, isn't it true that in, I
 242:15 believe it was 1997, Dr. Acquavella specifically
 242:16 noted that a major problem with the ongoing

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242:24 - 243:5	242:17 Agricultural Health Study was that the study 242:18 suffered from exposure misclassification? Goldstein, Daniel 11-16-2017 (00:00:31)	DG01.8
259:13 - 259:14	242:24 A. He did undertake an evaluation of 242:25 that study, and he did criticize the exposure 243:1 metrics at some length. Nonetheless, it is the 243:2 best available study design, and the failure of 243:3 that study to produce robust relationships would 243:4 indicate that there is very, very little likelihood 243:5 that glyphosate causes cancer. Goldstein, Daniel 11-17-2017 (00:00:05)	DG01.13
259:18 - 259:18	259:13 Q. And so do you agree that the AHS 259:14 suffered from exposure misclassification, sir? Goldstein, Daniel 11-17-2017 (00:00:00)	DG01.14
269:6 - 269:21	259:18 A. I do. Goldstein, Daniel 11-17-2017 (00:00:46) 269:6 Q. (BY MR. ESFANDIARY) Dr. Goldstein, 269:7 these -- well, first of all, the Bates number on 269:8 the bottom right-hand corner of this document is 269:9 MONGLY00885870, and this was produced by Monsanto 269:10 Company in this litigation. And the date of the 269:11 document is July 22, 1997, and it is addressed To 269:12 the Communications Subcommittee, and the signatore 269:13 right there is John Acquavella. 269:14 You know Dr. Acquavella, correct, Dr. 269:15 Goldstein? 269:16 A. Yes, I do. 269:17 Q. And he is an epidemiologist; correct? 269:18 A. That is correct. 269:19 Q. Do you consider him a respectable 269:20 epidemiologist? 269:21 A. Yes.	EXHIBIT16.1.2
270:19 - 271:10	Goldstein, Daniel 11-17-2017 (00:00:36) 270:19 Q. And Dr. 270:20 Acquavella, and this might be a bit before your 270:21 time in 1997, but he was an employee of Monsanto at 270:22 the time? 270:23 A. Yes, he would have been. 270:24 Q. Okay. And he is no longer an 270:25 employee, is he, sir?	DG01.16 clear

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271:1 A. That's correct.
 271:2 Q. Yeah. He still consults for Monsanto
 271:3 on kind of an ad hoc basis?
 271:4 A. For a number of years he did not. He
 271:5 was employed elsewhere and wasn't available for
 271:6 consultation. He retired about two years ago and
 271:7 has been doing some consulting work.
 271:8 Q. Okay. And did you work closely with
 271:9 Dr. Acquavella when he was at Monsanto?
 271:10 A. Yes, I did.

271:16 - 272:3

Goldstein, Daniel 11-17-2017 (00:00:31)

DG01.17

271:16 Q. Can I ask you, first of all, what the
 271:17 Communications Subcommittee is? Is that a part of
 271:18 Monsanto?
 271:19 A. No, it is a part of Crop Life.
 271:20 Q. Crop Life?
 271:21 A. Yes.
 271:22 Q. And what is Crop Life, sir?
 271:23 A. Crop Life is an industry organization
 271:24 that consists, its membership consists of pesticide
 271:25 manufacturers and merchandisers.
 272:1 Q. Okay. And obviously Monsanto is a
 272:2 member of Crop Life; correct?
 272:3 A. Yes, that is correct.

276:22 - 277:6

Goldstein, Daniel 11-17-2017 (00:00:16)

DG01.18

276:22 Dr. Goldstein, if you could please
 276:23 turn your attention to the page ending in Bates
 276:24 number 871?
 276:25 A. I need to look at the document for a
 277:1 moment.
 277:2 Q. Oh, please, yeah.
 277:3 A. We have been talking about the
 277:4 background of it, but I haven't actually looked at
 277:5 the document.
 277:6 Q. Sure.

277:7 - 277:18

Goldstein, Daniel 11-17-2017 (00:00:34)

DG01.19

277:7 A. Okay.
 277:8 Q. Actually, if you turn your attention
 277:9 to the first page, the front, yeah, the face, and
 277:10 if you look at the first paragraph of Dr.

EXHIBIT16.1.3

Page/Line	Source	ID
278:1 - 278:9	<p>277:11 Acquavella's comment there, it says, "At your last 277:12 meeting, I was asked to provide some background 277:13 thoughts on Epidemiology and the Agricultural 277:14 Health Study (AHS) that you could use to build 277:15 positive messages. Please find some preliminary 277:16 thoughts attached." 277:17 Did I read that correctly, sir? 277:18 A. Yes.</p>	DG01.20
278:13 - 278:19	<p>Goldstein, Daniel 11-17-2017 (00:00:37) 278:1 Q. (BY MR. ESFANDIARY) Okay. If you 278:2 turn your attention to page 871. And about halfway 278:3 down the section titled The AHS rationale, Dr. 278:4 Acquavella says, "But, the viability and eventual 278:5 impact of the AHS will depend on the investigators' 278:6 ability to generate a new class of scientific 278:7 leads, most of which will be invalid." 278:8 Did I read that correctly, sir? 278:9 A. Yes, you did.</p>	EXHIBIT16.2.1 EXHIBIT16.2.2
284:4 - 284:13	<p>Goldstein, Daniel 11-17-2017 (00:00:13) 278:13 Q. (BY MR. ESFANDIARY) And then right 278:14 after that, Dr. Acquavella says, "This has the 278:15 potential to be disruptive for the agricultural 278:16 chemical industry as new leads potentially take on 278:17 a life of their own." 278:18 Did I read that correctly, sir? 278:19 A. Yes, you did.</p>	DG01.21 EXHIBIT16.2.3
284:17 - 284:17	<p>Goldstein, Daniel 11-17-2017 (00:00:30) 284:4 Q. Okay. And Dr. Acquavella says, "Most 284:5 of the diseases to be studied in the AHS have scant 284:6 reasoning to link them putatively to pesticide 284:7 exposure. Thus, much of the research can be termed 284:8 'exploratory.' That's not unusual in epidemiology, 284:9 but it is unusual on this big a scale." 284:10 And my question to you is, sir, do 284:11 you agree that the AHS broke with established 284:12 epidemiological principles by embarking on a large 284:13 exploratory cohort study?</p>	DG01.28 EXHIBIT16.3.1
337:19 - 338:6	<p>Goldstein, Daniel 11-17-2017 (00:00:04) 284:17 A. No, I don't.</p>	DG01.29
	<p>Goldstein, Daniel 11-17-2017 (00:00:38)</p>	DG01.30

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	<p>337:19 Dr. Goldstein, over the past two days</p> <p>337:20 you have been asked a number of questions about</p> <p>337:21 what we've called the AHS; is that correct?</p> <p>337:22 A. Yes.</p> <p>337:23 Q. Okay. Can you tell the jury what the</p> <p>337:24 AHS is, please?</p> <p>337:25 A. So the Agricultural Health Study, or</p> <p>338:1 AHS, is the largest study of farmers and pesticide</p> <p>338:2 applicators and their health that has ever been</p> <p>338:3 undertaken. It is performed by the National Cancer</p> <p>338:4 Institute and has been going on now for nearly 25</p> <p>338:5 years.</p> <p>338:6 Q. Would you consider it a robust study?</p>	clear
338:9 - 338:11	<p>Goldstein, Daniel 11-17-2017 (00:00:09)</p> <p>338:9 A. It is an extremely robust study. I</p> <p>338:10 would consider it to be the most robust and</p> <p>338:11 reliable data set that we have available.</p>	DG01.31
339:13 - 339:25	<p>Goldstein, Daniel 11-17-2017 (00:00:31)</p> <p>339:13 Q. (BY MR. RUBIN) Okay. Just so the</p> <p>339:14 jury is absolutely clear, when was the most recent</p> <p>339:15 AHS report issued?</p> <p>339:16 A. Last week.</p> <p>339:17 Q. Just in November of 2017?</p> <p>339:18 A. Yes, that's correct.</p> <p>339:19 Q. Okay. Have you had a chance to look</p> <p>339:20 at that report and review it?</p> <p>339:21 A. I have.</p> <p>339:22 Q. And what did the report show?</p> <p>339:23 A. That report showed no relationship</p> <p>339:24 between user exposure to glyphosate and the</p> <p>339:25 occurrence of any cancer type in humans.</p>	DG01.32

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Total Time = 00:09:32

Documents Shown
EXHIBIT16