

<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p>IN THE COURT OF COMMON PLEAS OF CUYAHOGA COUNTY, OHIO ----- KEVIN KISS, a minor, by and through his next friend and natural mother, Anne Kiss, et al.,  Plaintiffs,  vs. Case No.  ANDREAS MARCOTTY, M.D. et al., 402593  Defendants.  -----  DEPOSITION OF BRUCE H. COHEN, M.D. Monday, February 26, 2001 ----- Deposition of BRUCE H. COHEN, M.D., called by the Plaintiffs for examination under the statute, taken before me, Karen M. Patterson, a Registered Merit Reporter and Notary Public in and for the State of Ohio, pursuant to notice and stipulations of counsel, at the offices of Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio, on the day and date set forth above, at 2: 10 o'clock p.m. ----- ----- -----</p>	<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p>BRUCE H. COHEN, M.D., of lawful age, called for examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:  EXAMINATION OF BRUCE H. COHEN, M.D. BY MS. TOSTI: Q. Doctor, would you please state your full name for us. A. Bruce Howard Cohen. Q. And what is your home address? A. 26525 Amhearst Road, Beachwood, Ohio, 44122. Q. Is that a single-family home, doctor? A. That's an apartment. Q. Do you have an apartment number? A. 106. Q. And is your current business address here at Cleveland Clinic's main campus? A. That's correct. Q. At the time that you rendered care to Kevin Kiss, was your business address also here at Cleveland Clinic's main campus? A. Yes. Q. In April of 1998, were you seeing</p>
<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p>APPEARANCES: On behalf of the Plaintiffs: Becker &amp; Mishkind Co., L.P.A., by JEANNE M. TOSTI, ESQ. Suite 660 Skylight Office Tower 1660 West Second Street Cleveland, Ohio 44113 (16) 241-2600  On behalf of the Defendant Andreas Marcotty, M.D.: Mazanec, Raskin &amp; Ryder Co., L.P.A., by D. CHERYL ATWELL, ESQ. 100 Franklin's Row 34305 Solon Road Cleveland, Ohio 44139 (440) 248-7906  On behalf of the Defendant Cleveland Clinic Foundation:  Roetzel &amp; Andress, by ANNA CARULAS, ESQ. INGRID KINKOPF-ZAJAC, ESQ. 1375 East Ninth Street One Cleveland Center, Tenth Floor Cleveland, Ohio 44114 (216) 623-0150  On behalf of the Defendant Signature Eye Associates: Ulmer &amp; Berne LLP, by PAMELA LOESEL, ESQ. 900 Bond Court Building 1300 East Ninth Street Cleveland, Ohio 44114 (216) 621-8400  ----- ----- -----</p>	<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p>patients anywhere besides the main campus of Cleveland Clinic? A. I may have also been seeing patients out at Kaiser Beachwood, but I'm not sure. Q. Would that have been on a consulting basis or on a regular basis? A. Consulting. That would be probably one afternoon every one to two months, but I can't remember when I stopped going out to Kaiser Beachwood. Q. And who is your current employer? A. The Cleveland Clinic Foundation. Q. And was that also true at the time that you rendered care to Kevin Kiss? A. Yes. Q. Aside from the professional services that you provide for Cleveland Clinic Foundation, do you provide professional services for any other entity? A. I do occasional consulting work with drug companies. Q. Any particular drug company? A. Rhone-Poulanc Rorer. I no longer do consulting work with them. Q. So you currently are not consulting</p>

<p>5</p> <p>1 with them?</p> <p>2 A. Correct.</p> <p>3 Q. And in the time period when you</p> <p>4 rendered care to Kevin Kiss, were you providing</p> <p>5 professional services for any other entity</p> <p>6 besides Cleveland Clinic?</p> <p>7 A. No.</p> <p>8 Q. Have you ever had your deposition</p> <p>9 taken before?</p> <p>10 A. Yes.</p> <p>11 Q. How many times?</p> <p>12 A. I don't remember.</p> <p>13 Q. Approximately, doctor.</p> <p>14 A. A dozen.</p> <p>15 Q. How many of those times were in a</p> <p>16 medical negligence case?</p> <p>17 MS. CARULAS: Note my objection.</p> <p>18 I'll have a continuing line of objection to this,</p> <p>19 but go ahead.</p> <p>20 A. Ail but one. The other one was a</p> <p>21 rape case, and one was a murder case, all in the</p> <p>22 context of a medical basis.</p> <p>23 Q. In those other instances that were</p> <p>24 medical negligence cases, were any of those cases</p> <p>25 ones in which you were named as a Defendant in</p>	<p>7</p> <p>1 I would also ask that you give ail of</p> <p>2 your answers verbally because the court reporter</p> <p>3 cannot take down head nods or hand motions, and,</p> <p>4 also, at some point defense counsel may choose to</p> <p>5 enter an objection. You are still required to</p> <p>6 answer my question unless your counsel instructs</p> <p>7 you not to do so. Do you understand those</p> <p>8 instructions?</p> <p>9 A. I understand. Thank you.</p> <p>10 Q. Now, doctor, we were talking about</p> <p>11 some of the depositions that you have given in</p> <p>12 the past. Have you given any depositions in a</p> <p>13 medical negligence case in the last year?</p> <p>14 A. Yes.</p> <p>15 Q. Can you tell me what the name of the</p> <p>16 Plaintiff was in those cases?</p> <p>17 A. No.</p> <p>18 Q. How many depositions have you given</p> <p>19 in the last year?</p> <p>20 A. One.</p> <p>21 Q. What was the allegation of negligence</p> <p>22 in that one case that you gave deposition last</p> <p>23 year?</p> <p>24 A. Anesthetic negligence.</p> <p>25 Q. Is that case still pending?</p>
<p>6</p> <p>1 the case?</p> <p>2 A. No.</p> <p>3 Q. Was Cleveland Clinic named as a</p> <p>4 Defendant in the case?</p> <p>5 A. No.</p> <p>6 Q. What was the reason that your</p> <p>7 deposition was being taken, and by that I mean</p> <p>8 was it as a medical expert, a fact witness?</p> <p>9 A. It was a medical expert and others</p> <p>10 were -- I was the treating physician.</p> <p>11 Q. But your care was not called into</p> <p>12 question in those?</p> <p>13 A. No.</p> <p>14 Q. I want to go over some of the ground</p> <p>15 rules for deposition. I'm sure counsel has had a</p> <p>16 chance to talk with you. This is a</p> <p>17 question-and-answer session. It's under oath.</p> <p>18 It's important that you understand my questions.</p> <p>19 If you don't understand them, let me know, I'll</p> <p>20 be happy to repeat the question or rephrase it.</p> <p>21 Otherwise, I'm going to assume that you</p> <p>22 understood the question and that you're able to</p> <p>23 answer it. At any point, if you would like to</p> <p>24 refer to the medical records that counsel has</p> <p>25 provided you with, feel free to do so.</p>	<p>8</p> <p>1 A. Yes, it is. I would be happy to</p> <p>2 provide you with the name, but it escapes me at</p> <p>3 this point.</p> <p>4 Q. So in any of the other cases where</p> <p>5 your deposition was taken, was your care ever</p> <p>6 called into question?</p> <p>7 A. No.</p> <p>8 Q. Now, you also informed me that you</p> <p>9 had acted as a medical/legal expert in some</p> <p>10 medical negligence proceedings.</p> <p>11 A. Yes.</p> <p>12 Q. How many times have you acted as a</p> <p>13 medical/legal expert?</p> <p>14 A. My guess would be about ten.</p> <p>15 Q. How many in the last year have you</p> <p>16 acted as an expert on?</p> <p>17 A. I think one. Definitely one and</p> <p>18 possibly two.</p> <p>19 Q. In the instances where you have acted</p> <p>20 as a medical/legal expert, were you providing</p> <p>21 expert opinions for the Plaintiff or the</p> <p>22 Defendant in the case?</p> <p>23 A. In the last year, for the Defendant.</p> <p>24 Q. Well, in the ten or so times.</p> <p>25 A. It's about 50/50 split.</p>

<p style="text-align: right;">9</p> <p>1 Q. What was the allegation of negligence 2 in the case that you provided opinion testimony 3 for in the last year? 4 A. It was a case where a child underwent 5 an anesthetic for a fractured arm, awoke from 6 surgery and then had a downhill neurologic course 7 following the surgery. It was alleged that 8 something happened during anesthesia that caused 9 his neurologic decline. The evidence of the case 10 suggests the child had an underlying illness 11 called a mitochondrial cytopathy. 12 Q. In the instances in which you acted 13 as a medical expert, how many times has your 14 deposition been taken? 15 A. My guess is about ten. 16 Q. Have you given trial testimony as an 17 expert? 18 A. In a medical/legal case, once. 19 Q. Was that for Plaintiff or for 20 Defendant? 21 A. That was for Plaintiff. 22 Q. In any of the instances that you have 23 acted as a medical/legal expert, have any of 24 those cases involved issues dealing with 25 papilledema?</p>	<p style="text-align: right;">11</p> <p>1 Ohio. 2 Q. At the time that you rendered care to 3 Kevin Kiss, did you have any additional medical 4 license? 5 A. No. 6 Q. Has your license in Ohio or any other 7 state ever been suspended, revoked or called into 8 question? 9 A. No. 10 Q. Are you board certified in any 11 particular areas of medicine? 12 A. Yes. 13 Q. Which areas? 14 A. Pediatrics, and a board in neurology 15 with special competence in child neurology. 16 Q. When did you obtain your board 17 certification in pediatrics? 18 A. 1989. 19 Q. And when did you obtain your board 20 certification in neurology? 21 A. 1990, 22 Q. Did you pass both of those on your 23 first attempt? 24 A. Yes. 25 Q. Where do you currently have hospital</p>
<p style="text-align: right;">10</p> <p>1 A. Not that I can recall. 2 Q. Any dealing with increased 3 intracranial pressure? 4 A. The trial case dealt with a child 5 with a brain tumor in which there may have been a 6 question of increased intracranial pressure, but 7 I do not recall. That was about ten years ago. 8 Q. Do you recall what the allegation of 9 negligence was in that case that went to trial? 10 A. The Plaintiff alleged that the 11 pediatrician failed to make a timely diagnosis of 12 the brain tumor. 13 Q. Do you recall the name of the 14 Plaintiff in that case? 15 A. I donot. 16 Q. Doctor, you are currently licensed to 17 practice medicine in the State of Ohio; is that 18 correct? 19 A. Yes. 20 Q. And were you also so licensed at the 21 time that you gave care to Kevin Kiss? 22 A. Yes. 23 Q. Are you licensed in any other states 24 besides Ohio? 25 A. I have no active licenses outside</p>	<p style="text-align: right;">12</p> <p>1 privileges? 2 A. The Cleveland Clinic Foundation. 3 Q. Do you have any hospital privileges 4 at any other hospital -- 5 A. No. 6 Q. -- affiliated with Cleveland Clinic? 7 A. You'd have to ask the general counsel 8 at the Cleveland Clinic. I don't know that 9 answer. This is the only place I practice 10 medicine. 11 Q. Was that also true when you rendered 12 care to Kevin Kiss, that you had privileges at 13 Cleveland Clinic's main campus? 14 A. Yes. 15 Q. Have your hospital privileges ever 16 been questioned, suspended or revoked? 17 A. No. 18 Q. Have you ever been denied hospital 19 privileges -- 20 A. No. 21 Q. -- anyplace? 22 You have to wait until I finish my 23 question before you answer or she'll have 24 difficulty taking us both down at the same time. 25 A. Thank you.</p>

<p style="text-align: right;">13</p> <p>1 Q. In the time period of April through 2 October of 1998, did you hold any administrative 3 positions at the Cleveland Clinic Foundation? 4 A. I served on committees. 5 Q. Did you hold any titles other than 6 staff physician at the Cleveland Clinic? 7 A. I was on the medical record 8 committee. 9 Q. What about department head or 10 anything like that? 11 A. No, I wasn't a department chief. 12 ----- 13 (Thereupon, PLAINTIFFS' Deposition 14 Exhibit 1 was mark'd for purposes 15 of identification.) 16 ----- 17 Q. Doctor, counsel has provided me with 18 a copy of your resume which we have marked as 19 Plaintiffs' Exhibit 1, and I would ask if you 20 would just identify Plaintiffs' Exhibit 1 for the 21 record for us, just indicate to us what that 22 document is. 23 A. This is a copy of my curriculum 24 vitae. It was updated on December 6, 2000. 25 Q. Is it current and up-to-date, as far</p>	<p style="text-align: right;">15</p> <p>1 of papilledema? 2 A. The word papilledema may be mentioned 3 in the body of some of those publications, but 4 none of them deal with the diagnosis or treatment 5 of papilledema. 6 Q. Any deal specifically with increased 7 intracranial pressure? 8 A. I co-authored a book chapter. 9 Q. Is it listed in your curriculum 10 vitae? 11 A. It should be. 12 Q. Would you please find it for us, and 13 I would like you to indicate which chapter you're 14 referring to, and please mark it with -- I don't 15 know, are they numbered? 16 A. Yes. 17 Q. Just circle the number, please. 18 A. Page 12, article 16. 19 Q. Any of the publications that you have 20 listed on your curriculum, do any of those deal 21 with visual field testing? 22 A. Not to my knowledge. 23 Q. Now, you also have a number of 24 presentations that are listed on your curriculum 25 vitae. Do any of those deal with the subjects</p>
<p style="text-align: right;">14</p> <p>1 as you know? 2 A. No. 3 Q. Are there any additions or 4 corrections that you would like to make to it? 5 A. There are no corrections or additions 6 relevant to anything we could possibly be talking 7 about today. I've given a couple more talks on 8 mitochondrial disease. I've had another abstract 9 or two accepted completely unrelated to anything 10 that we would be talking about today. 11 Q. Doctor, did you do part of your 12 training here at the Cleveland Clinic? 13 A. No. 14 Q. When did you first become affiliated 15 with the Cleveland Clinic? 16 A. I joined the staff on June 1st, 1989. 17 Q. Have you been employed by the 18 Cleveland Clinic since that time? 19 A. Yes, I have. 20 Q. And, doctor, your curriculum vitae 21 has listed on it numerous publications. Do any 22 of those publications deal with the subject 23 matter of arachnoid cysts? 24 A. Not to my knowledge. 25 Q. Do any deal with the subject matter</p>	<p style="text-align: right;">16</p> <p>1 that I just mentioned: papilledema, increased 2 intracranial pressure, arachnoid cysts or visual 3 field testing? 4 A. I gave a talk in 1995, page 15, talk 5 33, Neurologic Causes of Headaches, in which the 6 issue of increased intracranial pressure may have 7 come up. But I don't recall exactly. 8 Q. Do you have any syllabus or handouts 9 from that presentation? 10 A. I do not. That's all that I see. 11 Q. I'd like you to tell me what you have 12 reviewed for this deposition. 13 A. I've looked over my chart notes. 14 I've looked over some of the chart notes in the 15 file. 16 Q. Now, Kevin Kiss received some care 17 that was outside of the Cleveland Clinic from 18 Signature Eye Associates, Kids in the Sun. I 19 think there was an emergency room visit at 20 Southwest Hospital. Did you review any of those 21 documents that you recall? 22 A. I think I saw some document from Dr. 23 Marcotty, but I don't recall if it was a letter 24 or handwritten note or whatnot. I don't recall 25 anything from Kids in the Sun.</p>

<p style="text-align: right;">17</p> <p>1 Q. There were both inpatient as well as 2 outpatient records from Cleveland Clinic. Did 3 you review both the inpatient and the outpatient 4 records? 5 A. Yes, I did. 6 Q. Did you review any deposition 7 testimony in preparation for this deposition? 8 A. No, I did not. 9 Q. You haven't seen Dr. Luciano's or Dr. 10 Kosmorsky's deposition? 11 A. I have not reviewed them. 12 Q. Have you reviewed any summary of 13 those depositions? 14 A. No. 15 Q. And I believe there was also some 16 records from a psychological counseling service 17 of Kevin Kiss. Have you seen any of those 18 records? 19 A. I don't recall seeing those records. 20 I may have seen them and have certainly forgotten 21 what those records would have shown. 22 Q. Have you done any type of a 23 literature review? 24 A. I have not. 25 Q. Since this case was filed, have you</p>	<p style="text-align: right;">19</p> <p>1 MS. CARULAS: Note my objection. 2 A. In the context of any information in 3 a textbook is accurate, I would consider it to be 4 reliable but do not necessarily prescribe to 5 everything said in any textbook. 6 Q. As you sit here today, is there any 7 particular publication that you believe has 8 particular relevance to the issues in this case? 9 And I'm asking if there's one that you know of, 10 as you sit here today, that you feel has 11 particular relevance. 12 A. I do not. 13 Q. Have you participated in any research 14 dealing with the subject matter of papilledema? 15 A. No. 16 Q. Any with increased intracranial 17 pressure? 18 A. No. 19 Q. Any with arachnoid cysts? 20 A. No. 21 Q. Do you subspecialize in any area of 22 pediatric neurology? 23 A. The majority of patients I see have 24 either brain tumors or mitochondrial cytopathies. 25 Q. And what is a mitochondrial</p>
<p style="text-align: right;">18</p> <p>1 discussed this case with any physicians? 2 A. No, I have not. 3 Q. And other than with counsel, have you 4 discussed it with anyone else? 5 A. No, I have not. 6 Q. And aside from the clinical notes 7 that appear in the Cleveland Clinic records, 8 inpatient and outpatient records, do you have any 9 other notes or file referencing Kevin Kiss? 10 A. No. 11 Q. Doctor, is there a textbook in your 12 field of practice that you consider to be the 13 best, most reliable? 14 MS. CARULAS: Note my objection. Go 15 ahead. 16 A. There's not a single textbook that I 17 consider to be the best or most reliable. 18 Q. Is there any that you refer to more 19 often than not in your practice? 20 A. I tell the residents to get a book 21 written by Fenischerl which I think does a very 22 nice job overviewing the many topics of child 23 neurology. 24 Q. Do you consider the material in that 25 book to be reliable?</p>	<p style="text-align: right;">20</p> <p>1 cytopathy? 2 A. It is a biochemical disorder of 3 energy metabolism. 4 Q. How often in your practice do you see 5 patients with arachnoid cysts? 6 A. Maybe one patient a year with a 7 symptomatic arachnoid cyst. 8 Q. Have you referred children to surgery 9 for fenestration of arachnoid cysts? 10 A. Yes. 11 Q. Are there any complications that are 12 associated with arachnoid cysts? 13 A. There can be. 14 Q. And what are those complications? 15 A. Pressure on the brain that can cause 16 deformation of the brain structure itself and 17 problems resultant to that. 18 Q. Would you agree that headache is one 19 of the early signs of increased intracranial 20 pressure? 21 A. Headache can be one of the signs of 22 increased intracranial pressure. 23 Q. Is it one of the early signs? 24 A. It can be one of the early signs of 25 increased intracranial pressure.</p>

5 (Pages 17 to 20)

<p style="text-align: right;">21</p> <p>1 Q. After fenestration of an arachnoid 2 cyst, can increased intracranial pressure recur? 3 A. After fenestration of an arachnoid 4 cyst, the intracranial pressure can remain as it 5 was before the fenestration. It can decrease and 6 come back to normal, and if scarring takes place, 7 or the fenestration closes up again, conceivably 8 pressure can recur. 9 Q. Do patients who have undergone 10 fenestration require long-term followup with 11 neuro-imaging evaluation because increased 12 intracranial pressure can recur? 13 A. Usually not. 14 Q. What is papilledema? 15 A. Papilledema is a physical finding 16 that one sees in the back of the eye that can be 17 a result of a number of processes, the most 18 common of which would be increased pressure 19 inside the brain. 20 Q. Isn't it true that one of the earlier 21 signs of increased intracranial pressure is 22 swelling of the optic disc? 23 A. Could you rephrase the question? You 24 used a negative when you asked the question. You 25 said "isn't." Could you just rephrase it without</p>	<p style="text-align: right;">23</p> <p>1 papilledema? 2 A. Papilledema is a sign. 3 Q. When you observe the inner portion of 4 the eye, is there anything that indicates to you 5 that the papilledema is early rather than a 6 chronic or later form? 7 A. That's a difficult question to 8 answer. Papilledema can be graded as mild, 9 moderate or severe. But the rapidity at which 10 papilledema forms is based on the process at 11 hand. For example, if someone gets shot in the 12 head with a bullet, you can get papilledema 13 developing within minutes of that injury. In a 14 situation of chronic increased intracranial 15 pressure, papilledema can take months to develop. 16 Q. Doctor, if you see blurring of the 17 optic disc margins, is that any indication as to 18 whether this is something that is early or in a 19 chronic stage? 20 A. No. 21 Q. When you observe the inner eye, what 22 are you looking for, what signs or symptoms, 23 characteristics? In evaluating for papilledema, 24 what are the observations that you look for? 25 A. Central disc elevation, blurring of</p>
<p style="text-align: right;">22</p> <p>1 the "isn't" because that confuses me. 2 Q. Is one of the earlier signs of 3 increased intracranial pressure swelling of the 4 optic disc? 5 A. Optic disc swelling can be a sign of 6 increased intracranial pressure. It can occur 7 early in the course; it can occur very late in 8 the course. 9 Q. How is papilledema diagnosed? 10 A. By using an ophthalmoscope and 11 looking in the back of the eye with that 12 ophthalmoscope. 13 Q. Now, in the course of your practice, 14 do you ever perform ophthalmologic examinations 15 to look for papilledema? 16 A. Looking for papilledema using an 17 ophthalmoscope is part of the neurological 18 examination. 19 Q. So the answer to my question is, yes, 20 that you do that? 21 A. It's a -- I want to stay away from 22 the term whether or not I do an ophthalmologic 23 examination. I examine the eye as part of the 24 neurologic examination. 25 Q. What are the early signs of</p>	<p style="text-align: right;">24</p> <p>1 disc margins, hyperemia and bleeding. We also 2 look for pulsations of the veins or lack thereof. 3 Q. And the signs that you just 4 mentioned, can those be present whether it is an 5 acute problem or a chronic problem? 6 A. Yes, it can. 7 Q. Would you agree that, when 8 papilledema is found to be present, that the 9 patient should be monitored closely to determine 10 if the condition is progressing or if it's stable 11 or resolving? 12 MS. CARULAS: Note my objection. Go 13 ahead. 14 A. When one diagnoses papilledema, the 15 first thing the physician must do is investigate 16 as to why the papilledema is occurring, and then 17 if it is a treatable disease, to treat it. Once 18 the disease is treated, papilledema can take 19 months to disappear, even with adequate treatment 20 of the underlying process. 21 Q. Would you agree, though, that the 22 papilledema should be monitored to determine 23 whether it is resolving? 24 A. The papilledema should be monitored. 25 Q. Have you ever referred a patient to</p>

<p style="text-align: right;">25</p> <p>1 an ophthalmologist for evaluation, management and 2 followup for papilledema? 3 A. I've referred patients to 4 ophthalmologists for confirmation of my diagnosis 5 of the clinical finding of papilledema and for 6 followup. I do not recall if I've ever asked the 7 surgeon to manage the papilledema -- 8 Q. Is that -- 9 A. -- asked an ophthalmologist to manage 10 the papilledema. 11 Q. Is that something that you as a 12 neurologist would manage? 13 A. Depending on what the underlying 14 disease was, it could be something that I would 15 manage. 16 Q. If there was a question as to whether 17 or not a patient should undergo an optic nerve 18 fenestration, is that something that you as a 19 neurologist would determine, or would that be 20 something that an ophthalmologist would 21 recommend? 22 A. I would not determine that. 23 Q. From your perspective, if that was a 24 consideration, whose decision would it be to 25 determine whether a patient should undergo that</p>	<p style="text-align: right;">27</p> <p>1 MS. CARULAS: Note my objection. Go 2 ahead. 3 A. It can be. 4 Q. Are there any complications 5 associated with papilledema? 6 A. Papilledema is a clinical finding. 7 The complications are generally related to the 8 underlying cause of the papilledema. So if the 9 cause of the papilledema is a large brain tumor, 10 the complication of the underlying disease can be 11 death of the brain tumor. If the cause of 12 papilledema is a disorder called pseudotumor 13 cerebri, the complications of that may be quite a 14 bit different. 15 So, again, papilledema is a clinical 16 sign, very much like wheezing is a clinical 17 sign. Wheezing can be due to asthma, which is 18 generally a harmless condition, or lung cancer, 19 which is a fatal condition. It's up to the 20 doctor to determine what the underlying cause is 21 and treat that appropriately. 22 Q. Doctor, isn't it true that blindness 23 may result from persistent papilledema? 24 A. Again, I'm just going to ask you to 25 rephrase that question without the negative.</p>
<p style="text-align: right;">26</p> <p>1 particular procedure for papilledema? 2 MS. CARULAS: Please note my 3 objection. Go ahead. 4 A. I don't have an answer to that 5 question, because I don't know the context in 6 which it's being asked. 7 Q. Have you ever referred a patient for 8 an optic nerve fenestration? 9 A. I think I have asked an 10 ophthalmologist on a couple of occasions to 11 consider whether it would be helpful, and, to my 12 knowledge, none of my patients have had optic 13 nerve fenestrations, so the answer was no. 14 Q. They would give you their 15 recommendation then after evaluating the 16 patient? 17 A. The answer is yes, but when I send a 18 patient to a surgeon, it's generally with the 19 question, do they have a surgical procedure that 20 could be helpful in the context of the disease, 21 and then they offer an opinion, and then we 22 decide generally together whether or not it would 23 be reasonable to proceed with this. 24 Q. Is a finding of papilledema cause for 25 concern in a patient?</p>	<p style="text-align: right;">28</p> <p>1 Q. Can persistent papilledema result in 2 blindness or vision loss? 3 A. Again, papilledema is the sign of 4 what the underlying process is. 5 Q. What is optic atrophy? 6 A. Optic atrophy is the result of some 7 process which destroys the optic nerve. That 8 process can be due to a brain tumor; that process 9 can be due to increased intracranial pressure; 10 that process can be due to a stroke of the optic 11 nerve itself, and there are probably a dozen 12 other causes of optic atrophy. 13 Q. Can papilledema that is persistent 14 cause optic atrophy? 15 A. Patients with underlying neurologic 16 conditions that result in papilledema can result 17 with optic atrophy later on in the course of that 18 underlying condition. 19 Q. I want to make sure I'm understanding 20 what you're saying. The papilledema does not 21 result in optic atrophy, it doesn't cause optic 22 atrophy? 23 A. That's correct. That's correct. 24 Q. Increased intracranial pressure can 25 cause optic atrophy; correct?</p>

<p style="text-align: right;">29</p> <p>1       <b>A.</b> Optic atrophy can be seen as a result 2 of a number of neurologic factors, including 3 increased intracranial pressure. 4       <b>Q.</b> Doctor, if a patient has papilledema 5 and in some instances an optic nerve fenestration 6 is done, isn't that done in order to relieve the 7 papilledema to prevent optic atrophy? 8       <b>A.</b> One could do an optic nerve -- an 9 optic sheath fenestration to relieve intracranial 10 pressure in the context of pseudotumor cerebri. 11 Outside of that disease model, I don't have 12 any -- I've never referred a patient for an optic 13 sheath decompression, nor do I really know 14 anything else about it. 15       <b>Q.</b> Does the risk of optic nerve damage 16 increase with the duration of papilledema? 17       <b>A.</b> Not necessarily. I say that based on 18 the fact that I have a number of patients who 19 have had papilledema for many, many years and 20 never develop optic atrophy or visual loss. 21       <b>Q.</b> When a patient does develop optic 22 nerve atrophy, are there any visible changes that 23 can be seen on fundoscopic exam in the structures 24 of the eye? 25       <b>A.</b> Optic nerve atrophy implies that you</p>	<p style="text-align: right;">31</p> <p>1 ability to perceive objects throughout what we 2 would -- throughout space. So if one closes one 3 eye and imagines the visual field of one eye, one 4 can picture a clock with the central portion of 5 the clock representing the center of the visual 6 field and the numbers of the clock representing 7 the periphery of the visual field. 8       I don't know if I've answered your 9 question, because I forgot your question, so 10 could you restate it. 11       <b>Q.</b> I just asked you what visual field 12 testing was. 13       <b>A.</b> So the testing would attempt to 14 determine whether or not there were segments 15 missing from that field. 16       <b>Q.</b> Do you do visual field testing in 17 your practice? 18       <b>A.</b> We can do visual field testing in the 19 office, and it's called visual field testing by 20 confrontation. 21       <b>Q.</b> What does that mean? 22       <b>A.</b> We generally ask the patient to cover 23 one of their eyes with their hand, ask the 24 patient to stare at our nose, and then with our 25 outstretched hands placed halfway between</p>
<p style="text-align: right;">30</p> <p>1 see those visual changes. 2       <b>Q.</b> What would you see when you look into 3 the eye if there is optic nerve atrophy? 4       <b>A.</b> The optic nerve would appear smaller 5 than normal and generally paler than normal. 6       <b>Q.</b> When a young child develops a visual 7 field defect gradually, is a child always aware 8 that the vision is being lost? 9       <b>A.</b> The child may not be aware the vision 10 is lost. 11       <b>Q.</b> Now, in regard to persistent 12 papilledema, would the treatment be first to 13 treat the underlying cause of the papilledema? 14       <b>A.</b> That is correct, because, again, 15 papilledema is a sign. 16       <b>Q.</b> Are there any treatments specifically 17 for papilledema, irrespective of the cause, 18 anything that can be done just to relieve 19 papilledema? 20       <b>A.</b> If I understand your question 21 correctly, there is no treatment for 22 papilledema. There's treatment for the causes of 23 papilledema. 24       <b>Q.</b> What is visual field testing? 25       <b>A.</b> The visual field is a concept of the</p>	<p style="text-align: right;">32</p> <p>1 ourselves and the patient, we also close the 2 appropriate eye, we wiggle fingers at different 3 points in space and the patient tells us whether 4 or not they can perceive the wiggling fingers. 5 We assume that our visual field is intact when we 6 test a patient's visual field. So we'll wiggle 7 fingers at 6:00 o'clock, 3:00 o'clock, at noon, 8 at 9:00 o'clock, to see if the patient can 9 perceive the periphery as well as we can. 10       <b>Q.</b> Is visual field testing helpful in 11 monitoring a patient with persistent 12 papilledema? 13       <b>A.</b> It's one of the -- one of the 14 techniques one can use to help monitor patients 15 with increased intracranial pressure or 16 papilledema due to increased intracranial 17 pressure. 18       <b>Q.</b> And what are you looking for in a 19 patient that has increased intracranial pressure 20 and papilledema? 21       <b>A.</b> Well, what we look for is preserved 22 visual field, that the patient's peripheral 23 vision is as good as ours. 24       <b>Q.</b> And in some instances, can increased 25 intracranial pressure result in a patient</p>



<p style="text-align: right;">33</p> <p>1 developing a visual field defect?</p> <p>2 A. In some instances it can.</p> <p>3 Q. Now, if a patient is found to have</p> <p>4 persistent papilledema, would you agree that the</p> <p>5 patient should be followed closely for signs of</p> <p>6 optic atrophy?</p> <p>7 MS. ATWELL: Objection.</p> <p>8 MS. LOESEL: Objection.</p> <p>9 MS. CARULAS: Note my objection.</p> <p>10 A. Could I ask you to repeat the</p> <p>11 question?</p> <p>12 (Record read.)</p> <p>13 Q. By that, optic nerve atrophy.</p> <p>14 A. If one has optic nerve atrophy --</p> <p>15 optic nerve atrophy would be a deleterious effect</p> <p>16 of optic nerve papilledema. So the question,</p> <p>17 with really due respect, doesn't seem to be</p> <p>18 relevant. Maybe I just don't understand your</p> <p>19 question.</p> <p>20 Q. If a patient has persistent</p> <p>21 papilledema, you would agree that the patient</p> <p>22 should be followed to determine whether it is</p> <p>23 remaining stable, becoming chronic or resolving;</p> <p>24 correct? I think you told me yes to that</p> <p>25 before,</p>	<p style="text-align: right;">35</p> <p>1 see using an ophthalmoscope. A visual field</p> <p>2 deficit is a finding one would see using one of a</p> <p>3 number of visual field tests.</p> <p>4 Q. But does optic nerve atrophy result</p> <p>5 in visual field defects?</p> <p>6 A. Many patients with optic nerve</p> <p>7 atrophy do have visual field defects.</p> <p>8 Q. So if you're doing visual field</p> <p>9 testing and you find that there is a defect in</p> <p>10 the visual fields, would that give an indication</p> <p>11 of optic atrophy?</p> <p>12 A. No. Optic atrophy is something one</p> <p>13 sees with the ophthalmoscope. A visual field</p> <p>14 loss is a finding someone would see by visual</p> <p>15 field testing, and they're two very different</p> <p>16 parts of the examination.</p> <p>17 Q. But if you're doing visual field</p> <p>18 testing, wouldn't it raise a concern for optic</p> <p>19 atrophy and lead to evaluation for optic nerve</p> <p>20 atrophy?</p> <p>21 MS. ATWELL: Objection.</p> <p>22 MS. LOESEL: Objection.</p> <p>23 A. If one finds a visual field deficit,</p> <p>24 would one would want to do an oph -- if one</p> <p>25 finds a visual field deficit, one would want to</p>
<p style="text-align: right;">34</p> <p>1 A. Patients with underlying processes</p> <p>2 that result in papilledema need to be followed by</p> <p>3 a physician for all aspects of their underlying</p> <p>4 condition.</p> <p>5 Q. If the underlying condition was</p> <p>6 increased intracranial pressure resulting in</p> <p>7 papilledema, in that type of a patient, would you</p> <p>8 agree that the patient should be Followed closely</p> <p>9 for signs of optic nerve atrophy?</p> <p>10 MS. CARULAS: Note my objection.</p> <p>11 MS. LOESEL: Objection.</p> <p>12 MS. ATWELL: Objection.</p> <p>13 A. I apologize. Could I have the</p> <p>14 question again?</p> <p>15 (Record read.)</p> <p>16 A. The patient needs to be clinically</p> <p>17 followed and, again, the optic nerve atrophy</p> <p>18 would be an end result of a worst-case scenario</p> <p>19 of chronic increased intracranial pressure and</p> <p>20 resultant papilledema.</p> <p>21 Q. But, doctor, if you're doing visual</p> <p>22 field testing on a patient, would that give you</p> <p>23 an indication that the patient may be developing</p> <p>24 optic atrophy, if there's a visual field defect?</p> <p>25 A. Optic atrophy is a finding one would</p>	<p style="text-align: right;">36</p> <p>1 look in the eyes to see if there was some</p> <p>2 underlying finding, which could be optic atrophy</p> <p>3 or could be a number of other problems.</p> <p>4 Q. Do you have an independent</p> <p>5 recollection of Kevin Kiss as you sit here</p> <p>6 today? Do you remember him?</p> <p>7 A. I remember the case. I don't</p> <p>8 remember what the child looks like.</p> <p>9 Q. Do you remember some of your</p> <p>10 involvement with his treatment?</p> <p>11 A. Yes, I do.</p> <p>12 Q. Doctor, please feel free to look at</p> <p>13 the records if that will help you. When is the</p> <p>14 first time that Kevin Kiss came under your care?</p> <p>15 A. It would be April 14th, 1998.</p> <p>16 Q. And how is it that he came to see you</p> <p>17 on April 14th of 98?</p> <p>18 A. Dr. Luciano asked for my opinion</p> <p>19 regarding his medical situation.</p> <p>20 Q. Did he speak to you directly about</p> <p>21 Kevin?</p> <p>22 A. To my knowledge, he did not.</p> <p>23 Q. Do you know how you were contacted</p> <p>24 for that consultation?</p> <p>25 A. My recollection is that his nurse</p>

<p style="text-align: right;">37</p> <p>1 contacted me and asked if I would see him. 2 Q. Were you given any information about 3 Kevin at the time that you were asked to see 4 him? 5 A. I probably had access to his medical 6 file. 7 Q. And what is your understanding as to 8 why Kevin was referred to you by Dr. Luciano? 9 A. My understanding is that he had 10 problems following his initial surgery. Those 11 problems included irritability, mood disturbance 12 and intermittent headaches as well as hearing 13 noises in his right ear. And I can deduce that 14 Dr. Luciano wanted my opinion regarding what was 15 going on. 16 Q. Did Kevin also have vision problems? 17 A. Based on my examination, he had 18 papilledema at the time of that visit. 19 Q. In the history that was given to you, 20 were you told that he had disturbed vision? 21 A. I don't see it in the notes. 22 Q. Doctor, I see a note dated April 14th 23 of 98. I think it's timed at 10:30 in the 24 morning. 25 A. Yes.</p>	<p style="text-align: right;">39</p> <p>1 A. Yes, I do see that. 2 Q. Is it likely that that's information 3 you also were aware of at the time that you saw 4 Kevin? 5 A. That would be correct. 6 Q. Tell me what other history you were 7 aware of in regard to Kevin when you saw him on 8 April 14th of 98. You mentioned he had ear 9 noises. We've just discussed the vision 10 problems. What else? 11 A. Problems with behavior and emotion. 12 He had been in psychological counseling for that 13 problem. He had been on Diamox to help relieve 14 the intracranial pressure. He had headaches, 15 complaints of blurry vision and double vision. 16 Q. How were the headaches described? 17 A. The headaches were described as 18 right-sided, occurring every day, worse in the 19 morning and evening. They were sharp, triggered 20 by activity. 21 Q. And were they almost continuous 22 also? 23 A. Yes. I'm sorry, almost continuous. 24 Q. How long had Kevin been having 25 headaches when you saw him?</p>
<p style="text-align: right;">38</p> <p>1 Q. It says outpatient visit, Dr. Cohen. 2 Is that a note from you? 3 A. Yes. The majority of handwriting in 4 that note is from one of my residents, but that 5 note does reflect his visit with me. 6 Q. And did the resident see the patient 7 before you or with you? 8 A. The resident -- I don't recall in 9 this situation. As a general rule, the resident 10 sees the patient before me. 11 Q. Does the resident then provide you 12 with the information that is obtained on his 13 visit? 14 A. That is true, at which time I go back 15 in, review the relevant history, I do my own 16 examination, report any differences I may find 17 from the resident's examination. 18 Q. Do you add or make notations in the 19 chart if you disagree with something that the 20 resident has done? 21 A. That would be correct. 22 Q. Now, at the beginning of this note, 23 doesn't it state in the first line, referred for 24 headache, disturbed vision, having noises right 25 ear?</p>	<p style="text-align: right;">40</p> <p>1 A. My chart note indicates two months. 2 Q. And did he indicate anything made 3 them worse? 4 A. I thought I mentioned activity. 5 Activity made them worse. 6 Q. And you may have, doctor. 7 A. I'm sorry. 8 Q. Doctor, did the behavior changes that 9 were described coincide with the start of the 10 headaches and the vision problems that he had? 11 A. I don't know that for a fact. The 12 chart note indicates that both problems started 13 about two months previously. 14 Q. Now, you indicated that he was on 15 Diamox. It was your understanding that the 16 Diamox was to decrease intracranial pressure; is 17 that correct? 18 A. That's my assumption. 19 Q. Now, doctor, I believe in the 20 organization of the resident's note about halfway 21 down the page, it says I believe tried Diamox for 22 a month, didn't make big change. What does that 23 refer to, didn't make a big change? What type of 24 change is the resident referring to there? 25 A. My assumption is it didn't make a</p>

<p style="text-align: right;">41</p> <p>1 change in his clinical symptoms. 2 Q. The headaches, the vision, the ear 3 noises, those types of things? 4 A. That would be correct. 5 Q. Now, I believe there's also a 6 notation in this note that he was sleeping very 7 little at night. Did that coincide with the 8 start of the headaches and the ear noises and the 9 vision problems? 10 A. I don't know. I did not record that 11 information. 12 Q. Now, did you do a physical 13 examination when you saw him on the 14th? 14 A. Yes, I did. 15 Q. Did you find any deviations from 16 normal that you felt were significant in your 17 physical exam? 18 A. Yes, I did. 19 Q. Would you tell me what those were. 20 A. I thought he had papilledema. I 21 noted three plus papilledema. I also noted, as 22 did the resident, that he had normal visual 23 fields. The resident noted that, that his eye 24 movements were normal and that there was no 25 increase in tone. And those are important</p>	<p style="text-align: right;">43</p> <p>1 Q. I'm still not seeing exactly. I see 2 CNS, I see normal, nerves 2 and 12 intact. 3 A. That means cranial nerves 2 and 12 4 intact. 5 Q. Below that is what you're referring 6 to? 7 A. It says NL visual field. 8 Q. Ail right. What type of visual field 9 testing was done on April 14th of 98? 10 A. Confrontation. 11 Q. Were you present when the resident 12 did it? 13 A. I was not present when the resident 14 did it. 15 Q. Now, you did your own funduscopy 16 exam of Kevin's eyes; is that correct? 17 A. I did my own funduscopy exam, and I 18 did do other parts of his exam. I documented 19 some of those that weren't documented above, and 20 I specifically -- and didn't document others that 21 were documented above. 22 Q. When you did the funduscopy exam, 23 you found that Kevin had grade three papilledema 24 or three plus papilledema? 25 A. That's correct.</p>
<p style="text-align: right;">42</p> <p>1 because that would indicate that, despite the 2 fact that I thought he had increased intracranial 3 pressure, that I didn't think the increased 4 intracranial pressure was so high that he was in 5 physical danger. 6 Q. What physical danger are you 7 referring to? 8 A. If intracranial pressure is too high, 9 children can permanently injure their brain 10 through a process called herniation. And the 11 lack of those abnormal physical findings told me 12 that I didn't have to be concerned of that 13 problem occurring at that time. 14 Q. Now, you referred to visual field 15 testing. Can you tell me where that is 16 referenced? 17 A. In the resident's note, halfway down 18 that last page, that date, it says normal, 19 abbreviated NL, visual field. 20 Q. Show me which page. I'm not on the 21 right page. 22 A. (Indicating.) 23 Q. I just want to see the top of the 24 page. 25 MS. ATWELL: Under CNS.</p>	<p style="text-align: right;">44</p> <p>1 Q. What does grade three or three plus 2 papilledema indicate? 3 A. That's a notation for me. Since I 4 don't know, or am not familiar with, any of the 5 grading systems an ophthalmologist may use, I 6 tend to think of papilledema as a range from mild 7 to severe. And I use the designation one plus, 8 two plus, three plus or four plus to indicate to 9 me the severity of papilledema. So three plus 10 would indicate a swollen disc. He had lack of 11 venous pulsations, blurred disc margins without 12 hemorrhages. 13 Q. And is that what you saw when you did 14 the funduscopy exam on Kevin? 15 A. That's what I saw. 16 Q. Do you know, when you saw him on 17 April 14th of 98, how long his papilledema had 18 been present? 19 A. I do not know the answer to that 20 question. 21 Q. Were there any signs that would 22 indicate to you that the papilledema was acute or 23 chronic? 24 A. I don't have the ability to tell that 25 based on a physical finding.</p>

<p style="text-align: right;">45</p> <p>1 Q. Now, following your evaluation of 2 Kevin on the 14th, what were your impressions? 3 A. My impression was that the history 4 and constellation of clinical signs were 5 consistent with the increased intracranial 6 pressure. 7 Q. And what data did you have to support 8 your impression of increased intracranial 9 pressure? What were you relying on to come to 10 that impression? 11 A. The papilledema and the history, the 12 context of which I was seeing the child for. 13 Q. And what, in particular, in his 14 history? 15 A. The fact that he had an arachnoid 16 cyst, the fact that he had an operative procedure 17 for treatment of the arachnoid cyst, that the 18 symptoms had persisted, that he had failed a 19 trial of Diamox, and that he had papilledema. 20 Q. When you say the symptoms persisted, 21 are you speaking of the headache, the blurred 22 vision, the ear noises, the emotional 23 disturbances? 24 A. Certainly the headache. 25 Q. And, in actuality, didn't he have</p>	<p style="text-align: right;">47</p> <p>1 well for awhile after his surgery? You mentioned 2 that some children will have symptoms after 3 surgery, but he had his surgery in December. The 4 history that you have here is about a two-month 5 history of these other symptoms, isn't it, which 6 would be February to April? 7 A. Dr. Luciano's chart note dated 8 January 22nd, 1998 indicated that his headaches 9 started two weeks prior to that. So that would 10 be about January 8th. 11 Q. So the chart note on January 22 12 indicates that January 8th would have been about 13 the time his headaches started and about the time 14 his double vision started? 15 A. The history I obtained on April 14th, 16 say in two months, was again the history obtained 17 from the parent or parents at the time of the 18 visit. It's a history that we write down. 19 Q. When you saw him on the 14th, what 20 was your plan of care for him? I think you 21 mentioned to refer him to Dr. Luciano for 22 surgery. 23 A. From what I remember, I either called 24 Dr. Luciano or Dr. Luciano's nurse and suggested 25 that surgery would be my choice as to what to do.</p>
<p style="text-align: right;">46</p> <p>1 some relief from his symptoms after the surgery? 2 A. I think he had relief of some of the 3 symptoms for a period of time and then the 4 symptoms came back. 5 Q. And then they came back? 6 A. Yes. 7 Q. The fact that he was relieved of 8 symptoms and then they came back, would that add 9 any weight to your concern that this was 10 increased intracranial pressure? 11 A. Following a surgical procedure such 12 as fenestration of arachnoid cysts, children can 13 have irritability, mood disturbances; you can 14 have headaches after a surgical procedure. 15 Speaking against the diagnosis of increased 16 intracranial pressure is the fact that the CAT 17 scan really hadn't changed up until that point. 18 It was my clinical impression that he had 19 increased intracranial pressure, and my opinion 20 was that -- I put down in the chart to transfer 21 him to Dr. Luciano's care for surgery, that I 22 thought he had been given an adequate trial of 23 Diamox and all attempts to avoid a shunting 24 procedure had been done. 25 Q. In actuality, didn't he do pretty</p>	<p style="text-align: right;">48</p> <p>1 Q. Now, doctor, under your note, you 2 have -- is that treat -- what does the TX stand 3 for? 4 A. Transfer. 5 Q. Transfer to Dr. Luciano for surgery. 6 A. Yes. 7 Q. Then underneath that, you have eye 8 consult. Is that for visual fields? 9 A. It says eye consult visual field. 10 Q. Now, the type of surgery that you 11 were referring to in your plan, was that for the 12 shunting procedure? 13 A. From the best I can remember, I 14 wasn't convinced in my own mind whether the 15 subdural hygromas were what needed to be shunted 16 or the arachnoid cyst. And so I had to rely on 17 Dr. Luciano to make the correct decision. 18 Q. But it was to relieve the increased 19 intracranial pressure? 20 A. It was to relieve the increased 21 intracranial pressure, correct. 22 Q. Now, doctor, you indicated also eye 23 consult for visual field testing; is that 24 correct? 25 A. That's what I put in my chart note.</p>

<p style="text-align: right;">49</p> <p>1 Q. Why did you advise an eye consult for 2 visual field testing? 3 A. I think as part of the longitudinal 4 care of the chronic, long-term needs of a child 5 with papilledema and intracranial pressure, it 6 would be good to know what his visual field was, 7 is and will be in the future for educational 8 purposes, for example. 9 Q. At the time that you saw him on the 10 14th, were you of the opinion that he had chronic 11 long-term papilledema? 12 A. No, I didn't have an opinion 13 regarding that. In fact, from the notes, I 14 really wasn't worried about his vision at that 15 time. We had noted normal visual fields, and it 16 was -- I would have -- again, I would have put 17 that in there as part of the longterm 18 management, not because I saw an acute problem 19 that needed to be dealt with at that time. 20 Q. So you were looking to have an 21 ophthalmologist manage the papilledema over the 22 long term? 23 A. No. I was looking for an 24 ophthalmologist to help us out with a detailed 25 visual acuity examination, for example, to look</p>	<p style="text-align: right;">51</p> <p>1 Q. That was based on the test that was 2 done by the resident at the bedside? 3 A. By the resident and by me at the 4 bedside because that would have been something I 5 would have routinely done as part of assessing a 6 child. 7 Q. Well -- 8 A. In other words, did I indicate in the 9 chart? No. There's certain things I would 10 repeat, certain things I wouldn't repeat. 11 Q. When we talked about it before, you 12 indicated this was done by the resident and that 13 you weren't in the room when the resident did 14 it. 15 A. That's correct. 16 Q. Are you telling me you repeated it? 17 A. Yes. 18 Q. There's two visual field tests done 19 at the bedside on April 14th of 98, one by you 20 and one by the resident; correct? 21 A. That would have been correct. 22 Q. Now, when did you anticipate that 23 this eye consult would actually be done? 24 A. I have no expectation that it would 25 be done at any point in the immediate future. I</p>
<p style="text-align: right;">50</p> <p>1 at the papilledema and tell me whether it was 2 there or not, to get visual fields. Again, this 3 was not meant to be an emergent consult. It's 4 just something that we ought to get along the 5 way. 6 Q. Did you expect that the visual field 7 testing that an ophthalmologist would do would be 8 different than the one that was done by your 9 resident physician at the bedside? 10 A. Ophthalmologists do visual fields by 11 both confrontation and by a much more formal 12 method which, frankly, is sometimes difficult or 13 impossible to do in a seven-year-old, so a lot of 14 the ophthalmologists will do confrontational 15 visual fields as well. 16 Q. What were you expecting the 17 ophthalmologist in this case to do different than 18 what had already been done already for Kevin? 19 A. Frankly, nothing, with the addition 20 of possibly getting a detailed visual acuity 21 examination. 22 Q. Do you know whether Kevin had any 23 visual field defects at the time that you saw 24 him? 25 A. He did not.</p>	<p style="text-align: right;">52</p> <p>1 just wanted to get it -- get something documented 2 at some point. 3 Q. Now, you were referring him to 4 surgery, so did you anticipate it would be done 5 before surgery or after surgery? 6 A. I didn't anticipate it would be done 7 before surgery because it's hard to get things 8 arranged that quickly. 9 Q. Did you make any arrangements for an 10 eye consult for Kevin for visual field testing? 11 A. I do not remember. 12 Q. How would you normally go about doing 13 that, to make arrangements for visual field 14 testing for a child that you had seen? 15 A. The key point in this child's care 16 was to treat the underlying cause of the 17 increased intracranial pressure. The visual 18 field testing that was to be done could have been 19 done either as an inpatient or as an outpatient. 20 So when a child is not feeling well 21 after surgery, trying to get them to cooperate 22 with an eye exam sometimes can be difficult, so 23 we would probably arrange for it to be done at 24 some point as an outpatient when he was at home 25 and feeling a little better.</p>

<p style="text-align: right;">53</p> <p>1 Q. Did you make any such arrangements 2 for Kevin to have it done as an outpatient after 3 he was home? 4 A. I do not remember. 5 Q. Did you come across anything in the 6 chart that told you you did that? 7 A. I do not remember. I don't know if I 8 did it or if someone else did it. 9 Q. Did you inform Dr. Luciano that Kevin 10 should receive an eye consultation for visual 11 field testing? 12 A. I do not remember. 13 Q. Do you know if Kevin ever received an 14 eye consult as a result of your recommendation? 15 A. I know he was seen by an 16 ophthalmologist. I don't know if it was a result 17 of my recommendation and Dr. Luciano's 18 recommendation or some other person's 19 recommendation. 20 Q. When was he seen by the 21 ophthalmologist, that you're aware of? 22 A. I had seen Kevin on June 9th, 1998, 23 and my history obtained at that time was that 24 after his shunt was placed, meaning the surgical 25 procedure done on April 15th, 1998, he was 90</p>	<p style="text-align: right;">55</p> <p>1 atrophy had already occurred. 2 Q. Had already occurred when you saw him 3 on June 9th of 98? 4 A. Essentially had already occurred by 5 June 9th, 98. Probably it occurred long before I 6 ever met the child. 7 Q. Do you know when it occurred? 8 A. No, I do not. 9 Q. Who accompanied Kevin when you saw 10 him on April 14th of 98 to the visit? 11 A. Could I have the last couple 12 questions and answers read? 13 Q. Yes. 14 (Record read.) 15 A. My answer to your question was not 16 entirely complete and doesn't reflect accurately 17 my feelings about this. Do you mind if we just 18 take a break so I can get some water? 19 Q. Sure. Would you like to correct your 20 answer? I mean, if you would like to go and 21 correct your answer, you can go ahead and correct 22 your answer if you're uncomfortable as to what it 23 is you said. 24 MS. CARULAS: Or do it when you come 25 back if YOU want to take a break.</p>
<p style="text-align: right;">54</p> <p>1 percent back to normal in four days, and in two 2 weeks was a hundred percent. He was back at full 3 activities, and he was making straight As in 4 school. 5 On my examination, I noted mild optic 6 atrophy and no papilledema. I sent him to see 7 Dr. Marcotty for eye examination. I had sent him 8 to Dr. Marcotty because he had been seen by Dr. 9 Marcotty in the past. That was the child's eye 10 doctor. 11 Q. But between the time that you saw him 12 on April 14th of 98 and the time that you saw him 13 on June 9th, 98, did he see anyone for visual 14 field testing that you are aware of? 15 A. Not that I'm aware of. 16 Q. Had you anticipated that he would see 17 someone after you saw him on the 14th and before 18 you saw him again on the 9th of June? 19 A. I had seen him in the hospital, 20 followed him in the hospital, and he had done 21 very well in the hospital. So I can't tell you 22 if I told the family no need to see the eye 23 doctor or not. It's a moot point as to whether 24 or not he saw an eye doctor or not, because 25 whatever process occurred leading to optic</p>	<p style="text-align: right;">56</p> <p>1 A. Yes. It's difficult for me to answer 2 your question in the context of everything 3 surrounding that. 4 Q. Which question are we referring to? 5 A. The question as to when -- the 6 question that implies that the visual loss may 7 have taken place at some point in time, and I 8 think that's the crux to what we're all here 9 talking about. 10 And so I have an opinion regarding 11 that, and the opinion stated as, quote, I don't 12 know or I'm not sure, unquote, doesn't reflect 13 accurately what my feelings about that are. 14 Q. Would you like to correct it? 15 A. I would like to take a break and 16 correct it. 17 Q. All right. 18 A. Thankyou. 19 (Recess had.) 20 Q. Doctor, if you would like to add to 21 or correct whatever answer that you gave 22 previously to my question in regard to, I believe 23 it was, if you had an opinion as to when Kevin 24 developed his vision loss, please feel free to 25 answer that question or add to your answer</p>

<p style="text-align: right;">57</p> <p>1 previously.</p> <p>2 A. When we reread what I had said, I</p> <p>3 realized I had said something that didn't reflect</p> <p>4 my feelings about the situation.</p> <p>5 Q. And if you would like to correct it,</p> <p>6 please feel free to do so.</p> <p>7 A. The question as to when the visual</p> <p>8 loss took place is, I think, the crux of this</p> <p>9 entire matter. The child had normal vision prior</p> <p>10 to the surgical procedure done on April 15th,</p> <p>11 1998. That had been documented in an eye exam</p> <p>12 done by Dr. Marcotty back in February. The</p> <p>13 visual fields done in my office were normal. He</p> <p>14 had papilledema. Children with papilledema</p> <p>15 generally do not have visual loss with the</p> <p>16 papilledema. This child was destined to lose his</p> <p>17 vision at some point in time. That point in time</p> <p>18 may have been back in November 1997.</p> <p>19 The process of papilledema leading to</p> <p>20 optic atrophy with visual loss is one that is</p> <p>21 well documented in textbooks, but in fact rarely</p> <p>22 occurs in clinical practice. We all read in</p> <p>23 textbooks that we need to monitor patients with</p> <p>24 increased intracranial pressure for visual loss.</p> <p>25 In fact, we rarely see visual loss as part of our</p>	<p style="text-align: right;">59</p> <p>1 17th -- on the 16th, it was noted that his pupils</p> <p>2 were equal and reactive to light indicating that</p> <p>3 the cranial nerves were functioning.</p> <p>4 Q. Well --</p> <p>5 A. It doesn't --</p> <p>6 Q. It doesn't indicate visual field</p> <p>7 defects, though; correct?</p> <p>8 A. That's correct.</p> <p>9 Q. Now, doctor, you indicated that</p> <p>10 Kevin, and correct me if I'm misstating what you</p> <p>11 said, but that Kevin was destined to lose his</p> <p>12 vision at some point in time. Am I stating what</p> <p>13 you said correctly?</p> <p>14 A. I'm basing that statement on the fact</p> <p>15 that he in fact did lose his vision, that the</p> <p>16 vast majority of patients in this exact situation</p> <p>17 would not lose their vision.</p> <p>18 So that comment that he was destined</p> <p>19 to lose his vision was based on the a priori</p> <p>20 knowledge that he in fact did lose his vision.</p> <p>21 Q. You said that the rapid shift of</p> <p>22 cranial structures can result in vision loss;</p> <p>23 correct?</p> <p>24 A. One of the mechanisms of visual loss</p> <p>25 that may have been relevant in this case may have</p>
<p style="text-align: right;">58</p> <p>1 practice. I have patients with chronic increased</p> <p>2 intracranial pressure due to pseudotumor cerebri,</p> <p>3 and they don't lose their vision.</p> <p>4 The cause of the visual loss could be</p> <p>5 due to chronic increased intracranial pressure,</p> <p>6 it could be due to the relief of that</p> <p>7 intracranial pressure, the shift of brain</p> <p>8 contents from the displaced position they were in</p> <p>9 caused from the arachnoid cyst to a more natural</p> <p>10 position. The arachnoid cyst creates pressure</p> <p>11 that exerts itself on the brain over the course</p> <p>12 of many months to many years, which slowly</p> <p>13 displaces brain contents, including the optic</p> <p>14 nerves, and the relief of that pressure can also</p> <p>15 lead to a rapid shift which can then result in</p> <p>16 visual loss. In fact, eye exams documented in</p> <p>17 the chart following the surgical procedure didn't</p> <p>18 indicate any problem.</p> <p>19 Q. What eye exams are you referring to?</p> <p>20 A. I had made a note on April 18th,</p> <p>21 awake, alert, feels better, no headache,</p> <p>22 examination plus papilledema, otherwise okay</p> <p>23 neurologic exam, the day we discharged him from</p> <p>24 the hospital. One of the doctors indicates</p> <p>25 normal cranial nerves two through 12. On April</p>	<p style="text-align: right;">60</p> <p>1 been the relief of the cyst pressure.</p> <p>2 Q. And if that was indeed the cause, how</p> <p>3 soon after the relief of the pressure would you</p> <p>4 expect to see the vision loss occurring?</p> <p>5 A. I don't know the answer to that</p> <p>6 question.</p> <p>7 Q. Would you expect it to occur in a</p> <p>8 relatively short period of time, within days of</p> <p>9 the time of the surgery and the shunting</p> <p>10 procedure?</p> <p>11 A. It could have occurred within days to</p> <p>12 weeks following the shunting procedure.</p> <p>13 Q. Now, it's your opinion that his</p> <p>14 vision was normal when you saw him on April, I</p> <p>15 believe it was, 16th of 98?</p> <p>16 A. 14th.</p> <p>17 Q. 14th of 98. Is that correct?</p> <p>18 A. That's correct.</p> <p>19 Q. He did have impairment when you saw</p> <p>20 him then in June, on June 9th; correct?</p> <p>21 A. He had optic atrophy on June 9th. I</p> <p>22 did not do a visual acuity.</p> <p>23 Q. Did you do visual field testing on</p> <p>24 June 9th?</p> <p>25 A. Let me find my note and I'll answer</p>

<p style="text-align: right;">61</p> <p>1 your question. I did not document a visual field 2 check at that time. 3 Q. Now, when Kevin was admitted to the 4 hospital, you saw him during that admission; 5 correct? 6 A. Yes, I did. 7 Q. We just looked at some of those 8 notes. And one of the notes that you wrote was 9 on April 17th of 1998; correct? 10 A. That's correct. 11 Q. Now, I believe Kevin was actually 12 admitted on the 14th. Did you see him any time 13 between the 14th and the 17th? Your note is 14 written on the 17th, and that's the first one 15 that I see. 16 A. Yes, I saw him on the 16th. 17 Q. Okay. 18 A. There's a three-line note about 19 two-thirds of the way down the page. 20 Q. Okay. Yes, I see that. So you saw 21 him on the 16th? 22 A. Correct. 23 Q. And this was after his surgery; 24 correct? 25 A. It was after his surgery.</p>	<p style="text-align: right;">63</p> <p>1 Q. Did you feel at that point in time, 2 because he still had papilledema after the 3 shunting procedure, that he should be referred to 4 an ophthalmologist and followed to determine if 5 the papilledema was indeed resolving? 6 A. On that day, I did not refer him to 7 an ophthalmologist. I knew he was going to be 8 seen in followup by either the surgeon, myself or 9 both. 10 Q. Well, my question was in regard to an 11 ophthalmologist. Did you feel that when Kevin 12 was discharged from the hospital he should have 13 been followed by an ophthalmologist for his 14 papilledema? 15 A. No. 16 Q. Why not? 17 A. Because he would be seen by a 18 neurosurgeon and/or myself or both of us. 19 Q. And you felt that the evaluation done 20 by the neurosurgeon or yourself would be adequate 21 to follow the papilledema? 22 A. That is correct, because an 23 ophthalmologist can't treat papilledema or visual 24 loss. Only the surgeon can treat the underlying 25 disease process.</p>
<p style="text-align: right;">62</p> <p>1 Q. Did you check him for papilledema at 2 that point in time when you saw him on the 16th? 3 A. I did not. 4 Q. When you saw him on the 17th, did you 5 check him for papilledema? 6 A. I did, 7 Q. Now, would you have expected that his 8 papilledema would have been relieved by the 9 shunting procedure? 10 A. No. It can take many months for 11 papilledema to disappear. 12 Q. Did you have any concerns that the 13 papilledema would cause some type of visual 14 problems because it was persistent? 15 A. The answer to that question is no. 16 The papilledema was going to resolve because his 17 pressure had been adequately relieved. 18 Q. Did he still have increased 19 intracranial pressure when you saw him on the 20 17th? 21 A. My answer to your question would be 22 no, he did not have increased intracranial 23 pressure. His intracranial pressure was gone. 24 Papilledema can take many, many months to form. 25 And it can take many, many months to resolve.</p>	<p style="text-align: right;">64</p> <p>1 Q. Then why, when you saw him before his 2 surgery, did you want him to be referred to an 3 ophthalmologist for visual field testing? 4 MS. CARULAS: Note my objection. I 5 think we've been through that at length as to why 6 he felt long-term, but go ahead. 7 MS. TOSTI: I'm seeing a disparity in 8 his answer. At least it's sounding like it, and 9 I would just like him to clarify that. 10 MS. ATWELL: Objection. 11 MS. CARULAS: Objection is noted, but 12 go ahead. 13 A. A child with papilledema from 14 increased intracranial pressure is at risk to 15 develop some visual loss. When the child goes 16 back to school, we would like to document that 17 the vision is normal so that he can properly 18 read, for example. The purpose of documenting 19 normal vision or abnormal vision has to do with 20 the completeness of the medical care he receives, 21 not to circumvent or change the practice of what 22 had gone on or what goes on in the future. 23 Q. So, doctor, and I just want to 24 understand what you're saying, once he had this 25 shunting procedure done, there was no treatment</p>



<p style="text-align: right;">65</p> <p>1 available for Kevin's papilledema; is that 2 correct? 3 A. Papilledema is the sign. The disease 4 was an arachnoid cyst and increased intracranial 5 pressure. We may be dancing around a term here, 6 but it makes it difficult to answer your question 7 because at no point was any doctor treating the 8 papilledema. We were treating the increased 9 intracranial pressure, we were treating the 10 arachnoid cyst. I use the term "we" as all of 11 his treating physicians. 12 Q. Once the shunting procedure was done 13 and the papilledema persisted, was there any 14 other treatment open to Kevin to relieve his 15 papilledema? 16 MS. ATWELL: Objection. 17 MS. LOESEL: Objection. 18 A. Papilledema will persist for many 19 weeks to months following adequate relief of 20 intracranial pressure. So the fact that it 21 existed one day, two days, three days, five days, 22 two weeks or two months following the shunt 23 placement on April 15th is not relevant. What is 24 relevant is that his pressure was relieved. 25 We have two processes here. We have</p>	<p style="text-align: right;">67</p> <p>1 A. That's correct. 2 Q. You also saw him on the 18th; is that 3 correct? 4 A. I saw him on the 18th. 5 Q. Did you do a fundoscopic exam on him 6 on the 18th when you saw him? 7 A. I did. It showed papilledema. 8 Q. Was the papilledema at the same 9 degree that it was when you had seen him prior to 10 his shunting procedure? 11 A. My assumption is that it probably 12 would be. 13 Q. So it looked similar to you then? 14 A. That would be correct. 15 Q. Now, at the time that you saw him on 16 the 18th, did you feel that he was at risk for 17 optic nerve atrophy? 18 A. I don't know if I asked myself the 19 question on April 18th whether or not he would be 20 at risk for optic nerve atrophy. If you ask me 21 the question today, the answer would be that a 22 child who had undergone this series of events 23 would be at small risk of optic nerve atrophy. 24 Q. Now, doctor, you spoke earlier about 25 relieving increased intracranial pressure causing</p>
<p style="text-align: right;">66</p> <p>1 the process of the arachnoid cyst and the 2 increased intracranial pressure, and we have the 3 separate process, albeit related, to the fact 4 that this optic nerve underwent slow compression 5 over the course of many, many months, followed by 6 a procedure that relieved that pressure. 7 It will never be clear as to what 8 point this child's vision was destined to be 9 lost. It could have been due to the chronic 10 effect of papilledema that began many months 11 before the discovery of his arachnoid cyst, and 12 the pressure -- had the pressure been adequately 13 relieved by the fenestration back in 1997, he 14 could have lost vision subsequent to that. In 15 fact, the pressure was relieved in April of 98, 16 and he lost vision subsequent to that point. 17 Q. Do you have an opinion as to whether 18 his shunting procedure was done in a timely 19 manner to relieve his increased intracranial 20 pressure? 21 A. Yes, I do. 22 Q. What is your opinion? 23 A. It was done in a timely manner. 24 Q. When you saw him on the 17th, he 25 still had the papilledema; correct?</p>	<p style="text-align: right;">68</p> <p>1 a shifting of structures that can ultimately 2 result in vision loss. 3 How many times have you seen that 4 occur? 5 A. Once. 6 Q. One time besides Kevin? 7 A. No. 8 Q. This is the only time? 9 A. Kevin. I've taken care of many 10 patients before Kevin and many patients after 11 Kevin with increased intracranial pressure, and 12 this is the only case that I can recall where the 13 result was optic atrophy and visual loss. 14 Q. In the patients that you have cared 15 for, how many patients have you seen that have 16 developed optic atrophy as a result of increased 17 intracranial pressure? 18 A. This would be the case that comes to 19 mind. We have patients with brain tumors who 20 have pressure of their tumor on their optic nerve 21 and involvement of their optic nerve with the 22 tumor who develop optic atrophy. But in terms of 23 patients with visual loss secondary to an 24 arachnoid cyst or increased pressure, this case, 25 in my mind, is unique.</p>

<p style="text-align: right;">69</p> <p>1 Q. Now, Kevin was discharged, I believe, 2 on the 18th with papilledema. 3 A. That's correct. 4 Q. Should he have received evaluation 5 and followup by an ophthalmologist after 6 discharge? 7 MS. ATWELL: Objection. 8 MS. LOESEL: Objection. 9 MS. CARULAS: I'm going to object 10 because we have been over it and over it. But go 11 ahead. 12 A. Well, he did. Do you mean 13 immediately after discharge? 14 Q. Yes. 15 A. No. 16 Q. At what point should he have received 17 ophthalmologic evaluation after discharge? How 18 long a time period? 19 A. At some point in the future, when it 20 was -- when he had recovered from the steroid 21 taper and after he was followed up by Dr. Luciano 22 and myself. 23 Q. Can you give me some type of a time 24 range for that, when you think that ophthalmology 25 followup should have been done after discharge?</p>	<p style="text-align: right;">71</p> <p>1 Q. You didn't provide them with any type 2 of written instructions to obtain ophthalmology 3 followup after discharge, did you? 4 A. To the best of my knowledge, I did 5 not. 6 Q. Do you know, or have any knowledge, 7 of Dr. Luciano doing that with the family? 8 A. I wouldn't know. 9 Q. What was the plan of care at the 10 point of discharge for Kevin on April 18th of 11 98? 12 A. Generally, the surgeons will see the 13 children back in the outpatient department at 14 some point, one to two weeks later, to make sure 15 the wound is healing well and for a checkup. And 16 generally we see the patient back again for a CAT 17 scan one to two months later to make sure 18 everything is going okay. 19 Q. Now, when you saw Kevin on June 9th 20 of 98, was that for the followup that he was to 21 have with you? Was that the scheduled followup? 22 A. My guess would be that was the 23 scheduled followup. 24 Q. Now, when you saw him on that June 25 9th date, you indicated that you noted he did</p>
<p style="text-align: right;">70</p> <p>1 A. Sometime within a few months. 2 However, had I seen him on June 9th and his optic 3 nerve looked completely normal, I don't know if I 4 would have even sent him back to Dr. Marcotty. 5 Q. At the time of his discharge from the 6 hospital on April 18th, 98, did you believe that 7 Kevin had a chronic or persistent type 8 papilledema? 9 A. On April 18th when I sent him home, I 10 felt that his increased intracranial pressure and 11 arachnoid cyst had been adequately cared for. At 12 that point, the papilledema was present, but if 13 the shunt remained functional, it would be my 14 opinion that the papilledema would disappear over 15 the next few months. And the vast majority of 16 patients would have normal optic nerve findings 17 and normal visual findings following the 18 resolution of the papilledema. In Kevin's case, 19 when he was seen six weeks later, the papilledema 20 resolved, but instead of a normal looking optic 21 nerve, he had optic atrophy. 22 Q. So you don't recall advising the 23 family to get ophthalmology followup after 24 discharge, do you? 25 A. I don't recall one way or the other.</p>	<p style="text-align: right;">72</p> <p>1 have some mild optic atrophy. Did he also still 2 have papilledema to the level that he had when 3 you saw him in the hospital? 4 A. No. His papilledema was entirely 5 gone. 6 Q. And I believe you told me, you 7 answered this already, that you did not do visual 8 field testing at that time at that June 9th 9 visit; is that correct? 10 A. No, I did not. 11 Q. Now, is there a reason why you 12 referred him to Dr. Marcotty instead of someone 13 at the Cleveland Clinic when you saw him on June 14 9th? 15 A. Yes. 16 Q. What was that reason? 17 A. That he had seen Dr. Marcotty in the 18 past and that we try to establish a continuing 19 line of care within a specialty. So in my mind, 20 no one knew his eyes better -- I should say no 21 ophthalmologist knew his eyes better than Dr. 22 Marcotty, so there would be no one better to 23 follow him than Dr. Marcotty. 24 Q. Did you have any additional plan of 25 care for him other than referring him to Dr.</p>

<p style="text-align: right;">73</p> <p>1 Marcotty?</p> <p>2 A. I put down return visit PRN, which is</p> <p>3 a way of saying as needed. So I didn't establish</p> <p>4 any particular time that I wanted to see him</p> <p>5 back. What I really wanted is for Marcotty to</p> <p>6 take a look at his eyes and tell me what was</p> <p>7 going on.</p> <p>8 Q. How soon did you want him to see Dr.</p> <p>9 Marcotty? Did you indicate that to Kevin's</p> <p>10 parents?</p> <p>11 A. I didn't indicate it in the chart,</p> <p>12 no. Under the situation, it would not have been</p> <p>13 an emergency, but it would have been a statement</p> <p>14 like I would like you to see Dr. Marcotty as soon</p> <p>15 as can be conveniently arranged.</p> <p>16 Q. When you saw Kevin on June 9th, did</p> <p>17 he voice any concerns about his vision?</p> <p>18 A. No.</p> <p>19 Q. Did you find that odd for a child of</p> <p>20 his age not to be able to tell you that there was</p> <p>21 vision problems there?</p> <p>22 A. I would not find that odd.</p> <p>23 Q. Now, did you speak with Mr. and/or</p> <p>24 Mrs. Kiss on the 9th and tell them of your</p> <p>25 findings?</p>	<p style="text-align: right;">75</p> <p>1 Q. And what was the reason that Kevin</p> <p>2 came to see you on that date?</p> <p>3 A. My impression was that it was part of</p> <p>4 a followup visit, and I remember the parents had</p> <p>5 a lot of questions regarding the visual loss as a</p> <p>6 result of everything that had gone on.</p> <p>7 Q. Did you do a physical exam of Kevin</p> <p>8 on that date?</p> <p>9 A. It looks like my physical exam was</p> <p>10 limited to looking at his eye, seeing optic</p> <p>11 atrophy left eye greater than right, and a</p> <p>12 partial Marcus Cunn pupil on the left.</p> <p>13 Q. What is a Marcus Cunn pupil?</p> <p>14 A. That indicates that there is an</p> <p>15 injury to the left optic nerve.</p> <p>16 Q. Did you have any evaluation by Dr.</p> <p>17 Marcotty at the time that you saw him on October</p> <p>18 15th of 98 or by any other ophthalmologist from</p> <p>19 the Cleveland Clinic, any other input?</p> <p>20 A. Looks like -- yes, it looks like Dr.</p> <p>21 Kosmorsky from the Cleveland Clinic saw Kevin and</p> <p>22 had felt that his vision in his good eye was</p> <p>23 20/20, and his vision in his left eye was that he</p> <p>24 could detect hand motion, but nothing more than</p> <p>25 that.</p>
<p style="text-align: right;">74</p> <p>1 A. I put down here that I discussed the</p> <p>2 care plan management, prognosis for 20 minutes.</p> <p>3 So it's my assumption that I spent a reasonable</p> <p>4 amount of time discussing with them my findings.</p> <p>5 Q. Was it your impression when you saw</p> <p>6 him on the 9th that Kevin had some major vision</p> <p>7 loss?</p> <p>8 A. I did not know that. If I did know</p> <p>9 that, I didn't document it.</p> <p>10 Q. Did you indicate to Kevin's parents</p> <p>11 at all that there was some vision loss?</p> <p>12 A. I don't have a recollection of that,</p> <p>13 but from the context of what's in the note, I</p> <p>14 probably would have expressed some concern that</p> <p>15 there could be vision loss.</p> <p>16 Q. And when you saw him on June 9th,</p> <p>17 were there any signs of increased intracranial</p> <p>18 pressure at that time?</p> <p>19 A. None.</p> <p>20 Q. Now, you saw Kevin again after this</p> <p>21 June 9th, 98 visit; is that correct, I believe in</p> <p>22 October?</p> <p>23 A. I know I saw him again after that.</p> <p>24 Let me refer to my note. Yes. October 15th,</p> <p>25 1998.</p>	<p style="text-align: right;">76</p> <p>1 Q. Did you have any conversations with</p> <p>2 Dr. Kosmorsky about Kevin's vision?</p> <p>3 A. Not that I recall.</p> <p>4 Q. Any with Dr. Marcotty?</p> <p>5 A. I recall a phone call from Dr.</p> <p>6 Marcotty. I don't recall what date the phone</p> <p>7 call was, but my assumption is that it was after</p> <p>8 he had seen Kevin back in June.</p> <p>9 Q. Did you have any discussions with Dr.</p> <p>10 Luciano about Kevin's vision loss?</p> <p>11 A. Not that I recall.</p> <p>12 Q. You did not talk with him after you</p> <p>13 saw Kevin on June 9th of 98 to tell Dr. Luciano</p> <p>14 that you had found some optic atrophy?</p> <p>15 A. I can't imagine that I didn't discuss</p> <p>16 this with him, but I honestly do not recall any</p> <p>17 discussion regarding that finding. In other</p> <p>18 words, it would be my practice to call him up and</p> <p>19 say this is what I found, but I don't recall</p> <p>20 having that discussion, nor any subsequent</p> <p>21 discussions.</p> <p>22 Q. And, doctor, it was your opinion that</p> <p>23 Kevin's vision loss was secondary to his</p> <p>24 increased intracranial pressure and papilledema;</p> <p>25 correct?</p>

<p style="text-align: right;">77</p> <p>1 A. It's my impression that his visual 2 loss was a cumulative effect of the chronic 3 increased intracranial pressure due to the 4 arachnoid cyst and/or relief of that pressure. 5 Q. Well, doctor, in your clinical note 6 of October 15th, 98, under the P part of your 7 note, didn't you state secondary to increased 8 intracranial pressure and papilledema? 9 A. That's what I put in the chart note, 10 yes. The chart note doesn't reflect a complete 11 set of opinions regarding what may or may not 12 have transpired. 13 Q. Now, that note of October 15th, 98 14 says you had a frank discussion about the visual 15 loss, and that was with Kevin's parents? 16 A. Correct. 17 Q. Do you recall the content of that 18 discussion that you had with Kevin's parents? 19 A. Only in general. 20 Q. Can you tell me what you do recall 21 from that discussion. 22 A. What I recall is that the parents 23 were obviously upset that their son had developed 24 severe visual loss in one eye. The question any 25 reasonable parent would have is did something</p>	<p style="text-align: right;">79</p> <p>1 such as putting him on Diamox to try to reduce 2 the intracranial pressure. 3 Q. Doctor, do you have an opinion, if 4 his shunting procedure had been done sooner, 5 whether it would have made a difference in regard 6 to his vision loss? 7 MS. CARULAS: Objection. 8 A. I don't have an opinion because I 9 don't think we can know whether or not the visual 10 loss is due to the long-standing papilledema or 11 to the relief of that papilledema or, more 12 likely, a combination of both. 13 Q. When you had the conversation with 14 Kevin's parents on October 15th of 98, was 15 anybody else present for that conversation 16 besides you and Kevin's parents? 17 A. I don't recall. My resident had seen 18 the patient prior to me seeing the patient, but I 19 don't recall if the resident was in the room at 20 the time, nor do I recall if Kevin's parents had 21 any other adult member of the family there, nor 22 do I recall if Kevin was even in the room at the 23 time. 24 Q. At any point that you discussed 25 Kevin's case with Dr. Luciano, did you ever</p>
<p style="text-align: right;">78</p> <p>1 wrong happen to my child, was there a medical 2 error. 3 The discussion we had was almost 4 exactly the content of the discussion we're 5 having right now; a review of everything that had 6 happened to him up to this point, a review of all 7 the possibilities, a review of the fact that he 8 may have been destined to lose his vision prior 9 to medical involvement in this case in the first 10 place because relief of pressure can be damaging 11 to the optic nerve, that he may have been 12 destined to lose his vision at some point in time 13 prior to the ultimate shunting procedure done on 14 April 15th, and that, in my opinion, there was 15 very little, if anything, anyone could do to have 16 protected him from this rare, but obviously very 17 terrible, situation that he lost vision in one 18 eye; that the timing of the second surgical 19 procedure was appropriate because we all know 20 that placing a shunt is a procedure that has 21 risks, including the risk of the shunt not 22 working, the risk of anesthesia, the risk of 23 shunt infections, the risk of something else 24 going wrong like bleeding, and that a careful 25 surgeon would have done an alternative treatment</p>	<p style="text-align: right;">80</p> <p>1 discuss whether he agreed that Kevin's vision 2 loss was secondary to increased intracranial 3 pressure and papilledema? Was that ever 4 discussed with Dr. Luciano? 5 A. I don't think so. 6 Q. Aside from the dates that we just 7 looked at, the ones that we've just previously 8 reviewed, did you see Kevin on any other dates? 9 A. Not that I recall. 10 Q. Did you speak with Mr. and Mrs. Kiss 11 on any other dates other than the dates that you 12 saw him in the hospital and the visits that you 13 had with him in the Clinic? 14 A. There may have been a phone call 15 somewhere in the middle, but I don't recall if 16 there in fact was. 17 Q. Do you have any criticism of any of 18 the health care providers that provided care to 19 Kevin? 20 A. No. 21 Q. Do you blame Kevin or his family in 22 any way for the vision loss that he suffered? 23 A. No. 24 MS. TOSTI: I don't have any further 25 questions for you, doctor, but other counsel may</p>

<div>81</div> <div><div>1</div><div>have some.</div><div>2</div><div>MS. ATWELL: I have just a few.</div><div>3</div><div>EXAMINATION OF BRUCE H. COHEN, M.D.</div><div>4</div><div>BY MS. ATWELL:</div><div>5</div><div>Q. I'm the attorney for Dr. Marcotty; my</div><div>6</div><div>name is Cheryl Atwell.</div><div>7</div><div>Who was the resident who was with you</div><div>8</div><div>on April 14, 1998?</div><div>9</div><div>A. The resident whose name I cannot read</div><div>10</div><div>could be identified through the Cleveland Clinic</div><div>11</div><div>Foundation medical records office. There's ways</div><div>12</div><div>to identify that resident, because all residents</div><div>13</div><div>have their signature on file. I don't recall who</div><div>14</div><div>that resident was, nor can I read that signature.</div><div>15</div><div>Q. Looking at the resident's note on</div><div>16</div><div>April 14, if you don't mind if I come and stand</div><div>17</div><div>by you, there's just a couple words I want you to</div><div>18</div><div>try to read. I don't want you to try to read the</div><div>19</div><div>whole thing because we can read most of it. On</div><div>20</div><div>April 14, the resident, on the first page, midway</div><div>21</div><div>down, circled the number one, and then he wrote a</div><div>22</div><div>word.</div><div>23</div><div>A. It looks like panic attack past six</div><div>24</div><div>weeks.</div><div>25</div><div>Q. Got it. On the very bottom part of</div></div>	<div><div>83</div><div><div><div>I</div><div>AFFIDAVIT</div></div><div><div>2</div><div>I have read the Foregoing transcript from</div></div><div><div>3</div><div>page 1 through 82 and note the following</div></div><div><div>4</div><div>corrections:</div></div><div><div>5</div><div>PAGE</div></div><div><div>6</div><div>LINE</div></div><div><div>7</div><div>REQUESTED CHANGE</div></div><div><div>8</div><div></div></div><div><div>9</div><div></div></div><div><div>10</div><div></div></div><div><div>11</div><div></div></div><div><div>12</div><div></div></div><div><div>13</div><div></div></div><div><div>14</div><div></div></div><div><div>15</div><div></div></div><div><div>16</div><div></div></div><div><div>17</div><div></div></div><div><div>18</div><div></div></div><div><div>19</div><div></div></div><div><div>20</div><div></div></div><div><div>21</div><div></div></div><div><div>22</div><div></div></div><div><div>23</div><div></div></div><div><div>24</div><div></div></div><div><div>25</div><div></div></div></div><div><div><div>BRUCE H. COHEN, M.D.</div></div><div><div>Subscribed and sworn to before me this</div><div>day of , 2000.</div></div><div><div>Notary Public</div></div><div><div>My commission expires</div></div></div></div>
<div>82</div> <div><div><div>1</div><div>that first page, there's a word, and I can't read</div></div><div><div>2</div><div>that word. I'm just pointing to it.</div></div><div><div>3</div><div>A. Well, it says -- let me just try</div></div><div><div>4</div><div>to --</div></div><div><div>5</div><div>Q. I know I've got a copy and that makes</div></div><div><div>6</div><div>a difference, too. Emesis negative. It follows</div></div><div><div>7</div><div>it. Before that, there's something.</div></div><div><div>8</div><div>A. It looks like association. It looks</div></div><div><div>9</div><div>like associations, but associations with</div></div><div><div>10</div><div>increasing intracranial pressure. Emesis</div></div><div><div>11</div><div>negative, et cetera, etcetera.</div></div><div><div>12</div><div>MS. ATWELL: That's all I have.</div></div><div><div>13</div><div>Thank you.</div></div><div><div>14</div><div>MS. LOESEL: No questions.</div></div><div><div>15</div><div>MS. CARULAS: You have the right to</div></div><div><div>16</div><div>read over the transcript and make sure it's been</div></div><div><div>17</div><div>taken down accurately, and I would recommend you</div></div><div><div>18</div><div>do that.</div></div><div><div>19</div><div>THE WITNESS: Okay.</div></div><div><div>20</div><div>MS. CARULAS: So we won't waive.</div></div><div><div>21</div><div>Send it to me and I'll send it on to him.</div></div><div><div>22</div><div>MS. TOSTI: Thank you, doctor.</div></div><div><div>23</div><div>(Deposition concluded at 4:15 o'clock p.m.)</div></div><div><div>24</div><div>(Signature not waived.)</div></div><div><div>25</div><div>----</div></div></div>	<div><div>84</div><div><div><div><div>CERTIFICATE</div></div><div><div>State of Ohio,</div><div>County of Cuyahoga. )</div></div><div><div>SS:</div></div></div><div><div>I, Karen M. Patterson, a Notary Public</div><div>within and for the State of Ohio, duly</div><div>commissioned and qualified, do hereby certify</div><div>that the within named BRUCE H. COHEN, M.D. was by</div><div>me first duly sworn to testify to the truth, the</div><div>whole truth and nothing but the truth in the</div><div>cause aforesaid; that the testimony as above set</div><div>forth was by me reduced to stenotypy, afterwards</div><div>transcribed, and that the foregoing is a true and</div><div>correct transcription of the testimony.</div></div><div><div>I do further certify that this deposition</div><div>was taken at the time and place specified and was</div><div>completed without adjournment; that I am not a</div><div>relative or attorney for either party or</div><div>otherwise interested in the event of this action.</div></div><div><div>IN WITNESS WHEREOF, I have hereunto set my</div><div>hand and affixed my seal of office at Cleveland,</div><div>Ohio, on this 5th day of March, 2000.</div></div><div><div><div><div>Karen M. Patterson</div></div><div><div>Karen M. Patterson, Notary Public</div><div>Within and for the State of Ohio</div></div></div><div><div>My commission expires October 7, 2004.</div></div></div></div></div>

	65
1	I N D E X
2	
3	EXAMINATION OF BRUCE H. COHEN, M.D.
4	BY MS. TOSTI:..... 3 6
5	
6	EXAMINATION OF BRUCE H. COHEN, M.D.
7	BY MS. ATWELL: ..... 81 3
8	
9	PLAINTIFFS' Deposition
10	Exhibit I was mark'd..... 13 13
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

**WORD  
INDEX**

<p><b>A</b></p> <p><b>abbreviated</b> 42:19  <b>ability</b> 31:1 44:24  <b>able</b> 6:22 73:20  <b>abnormal</b> 42:11              64:19  <b>about</b> 7:10 8:14,25              9:15 10:7 13:9              14:7,10 29:14              36:20 37:2 40:13              40:20 47:4,10,12              47:13 49:14 51:11              52:12 55:17 56:9              56:13 57:4 61:18              67:24 73:17 76:2              76:10 77:14  <b>above</b> 1:21 43:19,21              84:9  <b>abstract</b> 14:8  <b>accepted</b> 14:9  <b>access</b> 37:5  <b>accompanied</b> 55:9  <b>accurate</b> 19:3  <b>accurately</b> 55:16              56:13 82:17  <b>across</b> 53:5  <b>acted</b> 8:9,12,16,19              9:12,23  <b>action</b> 84:13  <b>active</b> 10:25  <b>activities</b> 54:3  <b>activity</b> 39:20 40:4              40:5  <b>actuality</b> 45:25              46:25  <b>actually</b> 51:23              61:11  <b>acuity</b> 49:25 50:20              60:22  <b>acute</b> 24:5 44:22              49:18  <b>add</b> 38:18 46:8              56:20,25  <b>addition</b> 50:19  <b>additional</b> 11:3              72:24  <b>additions</b> 14:3,5  <b>address</b> 3:11,18,22  <b>adequate</b> 24:19              46:22 63:20 65:19  <b>adequately</b> 62:17              66:12 70:11  <b>adjournment</b> 84:12  <b>administrative</b> 13:2  <b>admission</b> 61:4  <b>admitted</b> 61:3,12  <b>adult</b> 79:21  <b>advise</b> 49:1  <b>advising</b> 70:22  <b>AFFIDAVIT</b> 83:1  <b>affiliated</b> 12:6              14:14  <b>affixed</b> 84:15</p>	<p><b>aforesaid</b> 84:9  <b>after</b> 21:1,3 26:15              46:1,14 47:1,2              52:5,21 53:2,24              54:17 60:3 61:23              61:25 63:2 68:10              69:5,13,17,21,25              70:23 71:3 74:20              74:23 76:7,12  <b>afternoon</b> 4:8  <b>afterwards</b> 84:9  <b>again</b> 21:7 27:15,24              28:3 30:14 34:14              34:17 47:16 49:16              50:2 54:18 71:16              74:20,23  <b>against</b> 46:15  <b>age</b> 3:1 73:20  <b>ago</b> 10:7  <b>agree</b> 20:18 24:7,21              33:4,21 34:8  <b>agreed</b> 80:1  <b>ahead</b> 5:19 18:15              24:13 26:3 27:2              55:21 64:6,12              69:11  <b>al</b> 1:4,8  <b>albeit</b> 66:3  <b>alert</b> 58:21  <b>allegation</b> 7:21 9:1              10:8  <b>alleged</b> 9:7 10:10  <b>almost</b> 39:21,23              78:3  <b>along</b> 50:4  <b>already</b> 50:18,18              55:1,2,4 72:7  <b>alternative</b> 78:25  <b>always</b> 30:7  <b>Amhearst</b> 3:12  <b>amount</b> 74:4  <b>andreas</b> 1:7 2:7  <b>Andress</b> 2:14  <b>and/or</b> 63:18 73:23              77:4  <b>anesthesia</b> 9:8              78:22  <b>anesthetic</b> 7:24 9:5  <b>ANNA</b> 2:15  <b>Anne</b> 1:4  <b>another</b> 14:8  <b>answer</b> 6:23 7:6              12:9,23 22:19              23:8 26:4,13,17              44:19 55:15,20,21              55:22 56:1,21,25              56:25 60:5,25              62:15,21 64:8              65:6 67:21  <b>answered</b> 31:8 72:7  <b>answers</b> 7:2 55:12  <b>anticipate</b> 51:22              52:4,6</p>	<p><b>anticipated</b> 54:16  <b>anybody</b> 79:15  <b>anyone</b> 18:4 54:13              78:15  <b>anyplace</b> 12:21  <b>anything</b> 13:10              14:6,9 16:25 23:4              29:14 30:18 40:2              53:5 78:15  <b>anywhere</b> 4:1  <b>apartment</b> 3:15,16  <b>apologize</b> 34:13  <b>appear</b> 18:7 30:4  <b>APPEARANCES</b>              2:2  <b>appropriate</b> 32:2              78:19  <b>appropriately</b>              27:21  <b>Approximately</b>              5:13  <b>April</b> 3:25 13:1              36:15,17 37:22              39:8 43:9 44:17              47:6,15 51:19              53:25 54:12 55:10              57:10 58:20,25              60:14 61:9 65:23              66:15 67:19 70:6              70:9 71:10 78:14              81:8,16,20  <b>arachnoid</b> 14:23              16:2 19:19 20:5,7              20:9,12 21:1,3              45:15,17 46:12              48:16 58:9,10              65:4,10 66:1,11              68:24 70:11 77:4  <b>area</b> 19:21  <b>areas</b> 11:11,13  <b>arm</b> 9:5  <b>around</b> 65:5  <b>arrange</b> 52:23  <b>arranged</b> 52:8              73:15  <b>arrangements</b> 52:9              52:13 53:1  <b>article</b> 15:18  <b>aside</b> 4:16 18:6 80:6  <b>asked</b> 21:24 25:6,9              26:6,9 31:11              36:18 37:1,3              67:18  <b>asking</b> 19:9  <b>aspects</b> 34:3  <b>assessing</b> 51:5  <b>associated</b> 20:12              27:5  <b>Associates</b> 2:19              16:18  <b>association</b> 82:8  <b>associations</b> 82:9,9  <b>assume</b> 6:21 32:5</p>	<p><b>assumption</b> 40:18              40:25 67:11 74:3              76:7  <b>asthma</b> 27:17  <b>atrophy</b> 28:5,6,12              28:14,17,21,22,25              29:1,7,20,22,25              30:3 33:6,13,14              33:15 34:9,17,24              34:25 35:4,7,11              35:12,19,20 36:2              54:6 55:1 57:20              60:21 67:17,20,23              68:13,16,22 70:21              72:1 75:11 76:14  <b>attack</b> 81:23  <b>attempt</b> 11:23              31:13  <b>attempts</b> 46:23  <b>attorney</b> 81:5 84:13  <b>atwell</b> 2:10 33:7              34:12 35:21 42:25              64:10 65:16 69:7              81:2,4,6 82:12              85:7  <b>available</b> 65:1  <b>Avenue</b> 1:19  <b>avoid</b> 46:23  <b>awake</b> 58:21  <b>aware</b> 30:7,9 39:3,7              53:21 54:14,15  <b>away</b> 22:21  <b>awhile</b> 47:1  <b>awoke</b> 9:5</p> <p><b>B</b></p> <p><b>back</b> 21:6,16 22:11              38:14 46:4,5,8              54:1,2 55:25              57:12,18 64:16              66:13 70:4 71:13              71:16 73:5 76:8  <b>based</b> 23:10 29:17              37:17 44:25 51:1              59:19  <b>basing</b> 59:14  <b>basis</b> 4:6,6 5:22  <b>Beachwood</b> 3:12              4:4,10  <b>Becker</b> 2:4  <b>become</b> 14:14  <b>becoming</b> 33:23  <b>bedside</b> 50:9 51:2,4              51:19  <b>before</b> 1:15 5:9              12:23 21:5 33:25              38:7,10 51:11              52:5,7 54:17 55:5              64:1 66:11 68:10              82:7 83:20  <b>began</b> 66:10  <b>beginning</b> 38:22  <b>behalf</b> 2:3,7,13,18</p>	<p><b>behavior</b> 39:11              40:8  <b>being</b> 3:3 6:7 26:6              30:8  <b>believe</b> 17:15 19:7              40:19,21 41:5              56:22 60:15 61:11              69:1 70:6 72:6              74:21  <b>Below</b> 43:5  <b>Berne</b> 2:20  <b>besides</b> 4:1 5:6              10:24 68:6 79:16  <b>best</b> 18:13,17 48:13              71:4  <b>better</b> 52:25 58:21              72:20,21,22  <b>between</b> 31:25              54:11 61:13  <b>big</b> 40:22,23  <b>biochemical</b> 20:2  <b>bit</b> 27:14  <b>blame</b> 80:21  <b>bleeding</b> 24:1 78:24  <b>blindness</b> 27:22              28:2  <b>blurred</b> 44:11 45:21  <b>blurring</b> 23:16,25  <b>blurry</b> 39:15  <b>board</b> 11:10,14,16              11:19  <b>body</b> 15:3  <b>Bond</b> 2:21  <b>book</b> 15:8 18:20,25  <b>both</b> 11:22 12:24              17:1,3 40:12              50:11 63:9,18              79:12  <b>bottom</b> 81:25  <b>brain</b> 10:5,12 19:24              20:15,16 21:19              27:9,11 28:8 42:9              58:7,11,13 68:19  <b>break</b> 55:18,25              56:15  <b>bruce</b> 1:10,13 3:1,6              3:10 81:3 83:18              84:7 85:3,6  <b>Building</b> 2:21  <b>bullet</b> 23:12  <b>business</b> 3:18,22</p> <p><b>C</b></p> <p><b>:all</b> 76:5,7,18 80:14  <b>:alled</b> 1:14 3:1 6:11              8:6 9:11 11:7              27:12 31:19 42:10              47:23  <b>:ame</b> 36:14,16 46:4              46:5,8 75:2  <b>:ampus</b> 3:19,23 4:1              12:13  <b>:ancer</b> 27:18</p>
--	--	---	--	--



<p><b>care</b> 3:21 4:14 5:4 6:11 8:5 10:21 11:2 12:12 16:16 36:14 46:21 47:20 49:4 52:15 64:20 68:9 71:9 72:19 72:25 74:2 80:18 80:18 <b>cared</b> 68:14 70:11 <b>careful</b> 78:24 <b>CARULAS</b> 2:15 5:17 18:14 19:1 24:12 26:2 27:1 33:9 34:10 55:24 64:4,11 69:9 79:7 82:15,20 <b>case</b> 1:6 5:16,21,21 6:1,4 7:13,22,25 8:22 9:2,4,9,18 10:4,9,14 17:25 18:1 19:8 36:7 50:17 59:25 68:12 68:18,24 70:18 78:9 79:25 <b>cases</b> 5:24,24 7:16 8:4 9:24 <b>CAT</b> 46:16 71:16 <b>cause</b> 20:15 26:24 27:8,9,11,20 28:14,21,25 30:13 30:17 52:16 58:4 60:2 62:13 84:9 <b>caused</b> 9:8 58:9 <b>causes</b> 16:5 28:12 30:22 <b>causing</b> 67:25 <b>center</b> 2:16 31:5 <b>central</b> 23:25 31:4 <b>cerebri</b> 27:13 29:10 58:2 <b>certain</b> 51:9,10 <b>certainly</b> 17:20 45:24 <b>CERTIFICATE</b> 84:2 <b>certification</b> 11:17 11:20 <b>certified</b> 3:4 11:10 <b>certify</b> 84:7,11 <b>cetera</b> 82:11,11 <b>chance</b> 6:16 <b>change</b> 40:22,23,24 41:1 64:21 83:5 <b>changed</b> 46:17 <b>changes</b> 29:22 30:1 40:8 <b>chapter</b> 15:8,13 <b>characteristics</b> 23:23 <b>chart</b> 16:13,14 38:19 40:1,12 46:20 47:7,11 48:25 51:9 53:6</p>	<p>58:17 73:11 77:9 77:10 <b>check</b> 61:2 62:1,5 <b>checkup</b> 71:15 <b>cheryl</b> 2:10 81:6 <b>chief</b> 13:11 <b>child</b> 9:4,10 10:4 11:15 18:22 30:6 30:7,9 36:8 45:12 49:4 51:6 52:14 52:20 55:6 57:9 57:16 64:13,15 67:22 73:19 78:1 <b>children</b> 20:8 42:9 46:12 47:2 57:14 71:13 <b>child's</b> 52:15 54:9 66:8 <b>choice</b> 47:25 <b>choose</b> 7:4 <b>chronic</b> 23:6,14,19 24:5 33:23 34:19 44:23 49:4,10 58:1,5 66:9 70:7 77:2 <b>circle</b> 15:17 <b>circled</b> 81:21 <b>circumvent</b> 64:21 <b>Civil</b> 3:3 <b>clarify</b> 64:9 <b>clear</b> 66:7 <b>Cleveland</b> 1:19,20 2:6,11,13,16,17 2:22 3:19,23 4:2 4:12,17 5:6 6:3 12:2,6,8,13 13:3,6 14:12,15,18 16:17 17:2 18:7 72:13 75:19,21 81:10 84:15 <b>Clinic</b> 1:19 2:13 4:2 4:12,17 5:6 6:3 12:2,6,8 13:3,6 14:12,15,18 16:17 17:2 18:7 72:13 75:19,21 80:13 81:10 <b>clinical</b> 18:6 25:5 27:6,15,16 41:1 45:4 46:18 57:22 77:5 <b>clinically</b> 34:16 <b>Clinic's</b> 3:19,23 12:13 <b>clock</b> 31:4,5,6 <b>close</b> 32:1 <b>closely</b> 24:9 33:5 34:8 <b>closes</b> 21:7 31:2 <b>CNS</b> 42:25 43:2 <b>Co</b> 2:4,9 <b>cohen</b> 1:10,13 3:1,6 3:10 38:1 81:3</p>	<p>83:18 84:7 85:3,6 <b>coincide</b> 40:9 41:7 <b>combination</b> 79:12 <b>come</b> 16:7 21:6 45:9 53:5 55:24 81:16 <b>comes</b> 68:18 <b>comment</b> 59:18 <b>commission</b> 83:25 84:19 <b>commissioned</b> 84:7 <b>committee</b> 13:8 <b>committees</b> 13:4 <b>common</b> 1:1 21:18 <b>companies</b> 4:21 <b>company</b> 4:22 <b>competence</b> 11:15 <b>complaints</b> 39:15 <b>complete</b> 55:16 77:10 <b>completed</b> 84:12 <b>completely</b> 14:9 70:3 <b>completeness</b> 64:20 <b>complication</b> 27:10 <b>complications</b> 20:11,14 27:4,7 27:13 <b>compression</b> 66:4 <b>conceivably</b> 21:7 <b>concept</b> 30:25 <b>concern</b> 26:25 35:18 46:9 74:14 <b>concerned</b> 42:12 <b>concerns</b> 62:12 73:17 <b>concluded</b> 82:23 <b>condition</b> 24:10 27:18,19 28:18 34:4,5 <b>conditions</b> 28:16 <b>confirmation</b> 25:4 <b>confrontation</b> 31:20 43:10 50:11 <b>confrontational</b> 50:14 <b>confuses</b> 22:1 <b>consider</b> 18:12,17 18:24 19:3 26:11 <b>consideration</b> 25:24 <b>consistent</b> 45:5 <b>constellation</b> 45:4 <b>consult</b> 48:8,9,23 49:1 50:3 51:23 52:10 53:14 <b>consultation</b> 36:24 53:10 <b>consulting</b> 4:5,7,20 4:24,25 <b>contacted</b> 36:23 37:1 <b>content</b> 77:17 78:4 <b>contents</b> 58:8,13 <b>context</b> 5:22 19:2</p>	<p>26:5,20 29:10 45:12 56:2 74:13 <b>continuing</b> 5:18 72:18 <b>continuous</b> 39:21 39:23 <b>conveniently</b> 73:15 <b>conversation</b> 79:13 79:15 <b>conversations</b> 76:1 <b>convinced</b> 48:14 <b>cooperate</b> 52:21 <b>copy</b> 13:18,23 82:5 <b>correct</b> 3:20 5:2 10:18 28:23,23,2 30:14 33:24 38:2 39:5 40:17 41:4 43:16,25 48:17,2 48:24 51:15,20,2 55:19,21,21 56:1 56:16,21 57:5 59:7,8,10,23 60:17,18,20 61:5 61:9,10,22,24 63:22 65:2 66:25 67:1,3,14 69:3 72:9 74:21 76:25 77:16 84:10 <b>corrections</b> 14:4,5 83:4 <b>correctly</b> 30:21 59:13 <b>counsel</b> 1:18 6:15 6:24 7:4,6 12:7 13:17 18:3 80:25 <b>counseling</b> 17:16 39:12 <b>county</b> 1:1 84:4 <b>couple</b> 14:7 26:10 55:11 81:17 <b>course</b> 9:6 22:7,8 22:13 28:17 58:1 66:5 <b>court</b> 1:1 2:2 17:2 <b>cover</b> 31:22 <b>co-authored</b> 15:8 <b>cranial</b> 43:3 58:25 59:3,22 <b>creates</b> 58:10 <b>criticism</b> 80:17 <b>crux</b> 56:8 57:8 <b>cumulative</b> 77:2 <b>current</b> 3:18 4:11 13:25 <b>currently</b> 4:25 10:16 11:25 <b>curriculum</b> 13:23 14:20 15:9,20,24 <b>cuyahoga</b> 1:1 84:4 <b>cyst</b> 20:7 21:2,4 45:16,17 48:16 58:9,10 60:1 65:4 65:10 66:1,11</p>	<p>68:24 70:11 77:4 <b>cysts</b> 14:23 16:2 19:19 20:5,9,12 46:12 <b>cytopathies</b> 19:24 <b>cytopathy</b> 9:11 20:1</p> <hr/> <p><b>D</b> <b>D</b> 2:10 85:1 <b>damage</b> 29:15 <b>damaging</b> 78:10 <b>dancing</b> 65:5 <b>danger</b> 42:5,6 <b>data</b> 45:7 <b>date</b> 1:20 42:18 71:25 75:2,8 76:6 <b>dated</b> 37:22 47:7 <b>dates</b> 80:6,8,11,11 <b>day</b> 1:20 39:18 58:23 63:6 65:21 83:21 84:15 <b>days</b> 54:1 60:8,11 65:21,21,21 <b>deal</b> 14:22,25 15:4 15:6,20,25 <b>dealing</b> 9:24 10:2 19:14 <b>dealt</b> 10:4 49:19 <b>death</b> 27:11 <b>December</b> 13:24 47:3 <b>decide</b> 26:22 <b>decision</b> 25:24 48:17 <b>decline</b> 9:9 <b>decompression</b> 29:13 <b>decrease</b> 21:5 40:16 <b>deduce</b> 37:13 <b>defect</b> 30:7 33:1 34:24 35:9 <b>defects</b> 35:5,7 50:23 59:7 <b>Defendant</b> 2:7,13 2:18 5:25 6:4 8:22 8:23 9:20 <b>Defendants</b> 1:8 <b>defense</b> 7:4 <b>deficit</b> 35:2,23,25 <b>Definitely</b> 8:17 <b>deformation</b> 20:16 <b>degree</b> 67:9 <b>deleterious</b> 33:15 <b>denied</b> 12:18 <b>department</b> 13:9,11 71:13 <b>Depending</b> 25:13 <b>deposed</b> 3:4 <b>deposition</b> 1:10,13 5:8 6:7,15 7:22 8:5 9:14 13:13 16:12 17:6,7,10 82:23 84:11 85:9</p>
--	--	--	---	--

<p><b>depositions</b> 7:11,12 7:18 17:13 <b>described</b> 39:16,17 40:9 <b>designation</b> 44:7 <b>despite</b> 42:1 <b>destined</b> 57:16 59:11,18 66:8 78:8,12 <b>destroys</b> 28:7 <b>detailed</b> 49:24 50:20 <b>detect</b> 75:24 <b>determine</b> 24:9,22 25:19,22,25 27:20 31:14 33:22 63:4 <b>develop</b> 23:15 29:20,21 64:15 68:22 <b>developed</b> 56:24 68:16 77:23 <b>developing</b> 23:13 33:1 34:23 <b>develops</b> 30:6 <b>deviations</b> 41:15 <b>diagnosed</b> 22:9 <b>diagnoses</b> 24:14 <b>diagnosis</b> 10:11 15:4 25:4 46:15 <b>Diamox</b> 39:13 40:15,16,21 45:19 46:23 79:1 <b>difference</b> 79:5 82:6 <b>differences</b> 38:16 <b>different</b> 27:14 32:2 35:15 50:8,17 <b>difficult</b> 23:7 50:12 52:22 56:1 65:6 <b>difficulty</b> 12:24 <b>directly</b> 36:20 <b>disagree</b> 38:19 <b>disappear</b> 24:19 62:11 70:14 <b>disc</b> 21:22 22:4,5 23:17,25 24:1 44:10,11 <b>discharge</b> 69:6,13 69:17,25 70:5,24 71:3,10 <b>discharged</b> 58:23 63:12 69:1 <b>discovery</b> 66:11 <b>discuss</b> 76:15 80:1 <b>discussed</b> 18:1,4 39:9 74:1 79:24 80:4 <b>discussing</b> 74:4 <b>discussion</b> 76:17,20 77:14,18,21 78:3 78:4 <b>discussions</b> 76:9,21 <b>disease</b> 14:8 24:17 24:18 25:14 26:20</p>	<p>27:10 29:11 63:25 65:3 <b>disorder</b> 20:2 27:12 <b>disparity</b> 64:7 <b>displaced</b> 58:8 <b>displaces</b> 58:13 <b>disturbance</b> 37:11 <b>disturbances</b> 45:23 46:13 <b>disturbed</b> 37:20 38:24 <b>doctor</b> 3:8,14 5:13 7:10 10:16 13:17 14:11,20 18:11 23:16 27:20,22 29:4 34:21 36:12 37:22 40:6,8,19 48:1,22 54:10,23 54:24 56:20 59:9 64:23 65:7 67:24 76:22 77:5 79:3 80:25 82:22 <b>doctors</b> 58:24 <b>document</b> 13:22 16:22 43:20 61:1 64:16 74:9 <b>documented</b> 43:18 43:19,21 52:1 57:11,21 58:16 <b>documenting</b> 64:18 <b>documents</b> 16:21 <b>doing</b> 34:21 35:8,17 52:12 71:7 <b>done</b> 17:22 29:6,6 30:18 38:20 43:9 46:24 50:8,18 51:2,5,12,18,23 51:25 52:4,6,18 52:19,23 53:2,25 54:20 57:10,12,13 63:19 64:25 65:12 66:18,23 69:25 78:13,25 79:4 <b>double</b> 39:15 47:14 <b>down</b> 7:3 12:24 40:21 42:17 46:20 47:18 61:19 73:2 74:1 81:21 82:17 <b>downhill</b> 9:6 <b>dozen</b> 5:14 28:11 <b>Dr</b> 16:22 17:9,9 36:18 37:8,14 38:1 46:21 47:7 47:21,24,24 48:5 48:17 53:9,17 54:7,8,8 57:12 69:21 70:4 71:7 72:12,17,21,23,25 73:8,14 75:16,20 76:2,4,5,9,13 79:25 80:4 81:5 <b>drug</b> 4:21,22 <b>due</b> 27:17 28:8,9,10</p>	<p>32:16 33:17 58:2 58:5,6 66:9 77:3 79:10 <b>duly</b> 3:3 84:6,8 <b>duration</b> 29:16 <b>during</b> 9:8 61:4</p> <hr/> <p><b>E</b></p> <p><b>E</b> 85:1 <b>ear</b> 37:13 38:25 39:8 41:2,8 45:22 <b>earlier</b> 21:20 22:2 67:24 <b>early</b> 20:19,23,24 22:7,25 23:5,18 <b>East</b> 2:16,21 <b>educational</b> 49:7 <b>effect</b> 33:15 66:10 77:2 <b>either</b> 19:24 47:23 52:19 63:8 84:13 <b>elevation</b> 23:25 <b>emergency</b> 16:19 73:13 <b>emergent</b> 50:3 <b>Emesis</b> 82:6,10 <b>emotion</b> 39:11 <b>emotional</b> 45:22 <b>employed</b> 14:17 <b>employer</b> 4:11 <b>end</b> 34:18 <b>energy</b> 20:3 <b>enter</b> 7:5 <b>entire</b> 57:9 <b>entirely</b> 55:16 72:4 <b>entity</b> 4:19 5:5 <b>equal</b> 59:2 <b>error</b> 78:2 <b>escapes</b> 8:2 <b>ESQ</b> 2:4,10,15,15 2:20 <b>Essentially</b> 55:4 <b>establish</b> 72:18 73:3 <b>et</b> 1:4,8 82:11,11 <b>Euclid</b> 1:19 <b>evaluating</b> 23:23 26:15 <b>evaluation</b> 21:11 25:1 35:19 45:1 63:19 69:4,17 75:16 <b>even</b> 24:19 70:4 79:22 <b>evening</b> 39:19 <b>event</b> 84:13 <b>events</b> 67:22 <b>ever</b> 5:8 8:5 11:7 12:15,18 22:14 24:25 25:6 26:7 53:13 55:6 79:25 80:3 <b>every</b> 4:8 39:18 <b>everything</b> 19:5</p>	<p>56:2 71:18 75:6 78:5 <b>evidence</b> 9:9 <b>exact</b> 59:16 <b>exactly</b> 16:7 43:1 78:4 <b>exam</b> 29:23 41:17 43:16,17,18,22 44:14 52:22 57:11 58:23 67:5 75:7,9 <b>examination</b> 1:14 3:2,6 22:18,23,24 35:16 37:17 38:16 38:17 41:13 49:25 50:21 54:5,7 58:22 81:3 85:3,6 <b>examinations</b> 22:14 <b>examine</b> 22:23 <b>example</b> 23:11 49:8 49:25 64:18 <b>exams</b> 58:16,19 <b>exerts</b> 58:11 <b>Exhibit</b> 13:14,19,20 85:10 <b>existed</b> 65:21 <b>expect</b> 50:6 60:4,7 <b>expectation</b> 51:24 <b>expected</b> 62:7 <b>expecting</b> 50:16 <b>expert</b> 6:8,9 8:9,13 8:16,20,21 9:13 9:17,23 <b>expires</b> 83:25 84:19 <b>expressed</b> 74:14 <b>eye</b> 2:18 16:18 21:16 22:11,23 23:4,21 29:24 30:3 31:3,3 32:2 41:23 48:7,9,22 49:1 51:23 52:10 52:22 53:10,14 54:7,9,22,24 57:11 58:16,19 75:10,11,22,23 77:24 78:18 <b>eyes</b> 31:23 36:1 43:16 72:20,21 73:6</p> <hr/> <p><b>F</b></p> <p><b>fact</b> 6:8 29:18 40:11 42:2 45:15,16 46:7,16 49:13 57:21,25 58:16 59:14,15,20 65:20 66:3,15 78:7 80:16 <b>factors</b> 29:2 <b>failed</b> 10:11 45:18 <b>familiar</b> 44:4 <b>family</b> 54:22 70:23 71:7 79:21 80:21 <b>far</b> 13:25</p>	<p><b>fatal</b> 27:19 <b>February</b> 1:11 47:6 57:12 <b>feel</b> 6:25 19:10 36:12 56:24 57:6 63:1,11 67:16 <b>feeling</b> 52:20,25 <b>feelings</b> 55:17 56:13 57:4 <b>feels</b> 58:21 <b>felt</b> 41:16 63:19 64:6 70:10 75:22 <b>fenestration</b> 20:9 21:1,3,5,7,10 25:18 26:8 29:5,9 46:12 66:13 <b>fenestrations</b> 26:13 <b>Fenischerl</b> 18:21 <b>few</b> 70:1,15 81:2 <b>field</b> 15:21 16:3 18:12 30:7,24,25 31:3,6,7,11,15,16 31:18,19 32:5,6 32:10,22 33:1 34:22,24 35:1,3,5 35:7,8,13,15,17 35:23,25 42:14,19 43:7,8 48:9,23 49:2,6 50:6,23 51:18 52:10,13,18 53:11 54:14 59:6 60:23 61:1 64:3 72:8 <b>fields</b> 35:10 41:23 48:8 49:15 50:2 50:10,15 57:13 <b>file</b> 16:15 18:9 37:6 81:13 <b>filed</b> 17:25 <b>find</b> 15:12 35:9 38:16 41:15 60:25 73:19,22 <b>finding</b> 21:15 25:5 26:24 27:6 34:25 35:2,14 36:2 44:25 76:17 <b>findings</b> 42:11 70:16,17 73:25 74:4 <b>finds</b> 35:23,25 <b>fingers</b> 32:2,4,7 <b>finish</b> 12:22 <b>first</b> 3:3 11:23 14:14 24:15 30:12 36:14 38:23 61:14 78:9 81:20 82:1 84:8 <b>five</b> 65:21 <b>Floor</b> 2:16 <b>follow</b> 63:21 72:23 <b>followed</b> 33:5,22 34:2,8,17 54:20 63:4,13 66:5</p>
--	---	--	---	--

<p>69:21  <b>following</b> 9:7 37:10  45:1 46:11 58:17  60:12 65:19,22  70:17 83:3  <b>follows</b> 3:5 82:6  <b>followup</b> 21:10 25:2  25:6 63:8 69:5,25  70:23 71:3,20,21  71:23 75:4  <b>foregoing</b> 83:2  84:10  <b>forgot</b> 31:9  <b>forgotten</b> 17:20  <b>form</b> 23:6 62:24  <b>formal</b> 50:11  <b>forms</b> 23:10  <b>forth</b> 1:20 84:9  <b>found</b> 24:8 33:3  43:23 76:14,19  <b>Foundation</b> 1:19  2:13 4:12,17 12:2  13:3 81:11  <b>four</b> 44:8 54:1  <b>fractured</b> 9:5  <b>frank</b> 77:14  <b>Franklin's</b> 2:10  <b>frankly</b> 50:12,19  <b>free</b> 6:25 36:12  56:24 57:6  <b>friend</b> 1:3  <b>from</b> 4:16 9:5 16:9  16:17 22:25 17:2  17:16 18:6 22:21  25:23 27:23 31:15  38:2,4,17 41:15  44:6 46:1 47:17  47:23 48:13 49:13  58:8,9,23 63:12  64:13 69:20 70:5  74:13 75:18,21  76:5 77:21 78:16  80:6 83:2  <b>full</b> 3:9 54:2  <b>functional</b> 70:13  <b>functioning</b> 59:3  <b>fundusoscopic</b> 29:23  43:15,17,22 44:14  67:5  <b>further</b> 80:24 84:11  <b>future</b> 49:7 51:25  64:22 69:19</p>	<p><b>getting</b> 50:20  <b>give</b> 7:1 26:14 34:22  35:10 69:23  <b>given</b> 7:11,12,18  9:16 14:7 37:2,19  46:22  <b>go</b> 5:19 6:14 18:14  24:12 26:3 27:1  38:14 52:12 55:20  55:21 64:6,12  69:10  <b>goes</b> 64:15,22  <b>going</b> 4:9 6:21  27:24 37:15 62:16  63:7 69:9 71:18  73:7 78:24  <b>gone</b> 62:23 64:22  72:5 75:6  <b>good</b> 32:23 49:6  75:22  <b>grade</b> 43:23 44:1  <b>graded</b> 23:8  <b>grading</b> 44:5  <b>gradually</b> 30:7  <b>greater</b> 75:11  <b>ground</b> 6:14  <b>guess</b> 8:14 9:15  71:22  <b>Gunn</b> 75:12,13</p>	<p><b>helpful</b> 26:11,20  32:10  <b>hemorrhages</b> 44:12  <b>hereinafter</b> 3:4  <b>hereunto</b> 84:14  <b>herniation</b> 42:10  <b>high</b> 42:4,8  <b>him</b> 36:6 37:1,4  39:7,25 41:13  44:16 46:21 47:19  47:20,21 49:9  50:24 52:3 54:6,7  54:11,12,17,18,19  54:20 55:2,10  58:23 60:14,20  61:4,12,16,21  62:1,2,4,5,19 63:6  64:1,2,9 66:24  67:2,4,5,6,9,15  70:2,4,9 71:24  72:3,12,13,23,25  72:25 73:4,8 74:6  74:16,23 75:17  76:12,16,18 78:6  78:16 79:1 80:12  80:13 82:21  <b>history</b> 37:19 38:15  39:6 45:3,11,14  47:4,5,15,16,18  53:23  <b>hold</b> 13:2,5  <b>home</b> 3:11,14 52:24  53:3 70:9  <b>honestly</b> 76:16  <b>hospital</b> 11:25 12:3  12:4,15,18 16:20  54:19,20,21 58:24  61:4 63:12 70:6  72:3 80:12  <b>Howard</b> 3:10  <b>hundred</b> 54:2  <b>hygromas</b> 48:15  <b>hyperemia</b> 24:1</p>	<p><b>included</b> 37:11  <b>including</b> 29:2  58:13 78:21  <b>increase</b> 29:16  41:25  <b>increased</b> 10:2,6  15:6 16:1,6 19:16  20:19,22,25 21:2  21:11,18,21 22:3  22:6 23:14 28:9  28:24 29:3 32:15  32:16,19,24 34:6  34:19 42:2,3 45:5  45:8 46:10,15,19  48:18,20 52:17  57:24 58:1,5  62:18,22 64:14  65:4,8 66:2,19  67:25 68:11,16,24  70:10 74:17 76:24  77:3,7 80:2  <b>increasing</b> 82:10  <b>indeed</b> 60:2 63:5  <b>independent</b> 36:4  <b>indicate</b> 13:21  15:13 40:2 42:1  44:2,8,10,22 51:8  58:18 59:6 73:9  73:11 74:10  <b>indicated</b> 40:14  47:8 48:22 51:12  59:9 71:25  <b>indicates</b> 23:4 40:1  40:12 47:12 58:24  75:14  <b>indicating</b> 42:22  59:2  <b>indication</b> 23:17  34:23 35:10  <b>infections</b> 78:23  <b>inform</b> 53:9  <b>information</b> 19:2  37:2 38:12 39:2  41:11  <b>informed</b> 8:8  <b>INGRID</b> 2:15  <b>initial</b> 37:10  <b>injure</b> 42:9  <b>injury</b> 23:13 75:15  <b>inner</b> 23:3,21  <b>inpatient</b> 17:1,3  18:8 52:19  <b>input</b> 75:19  <b>inside</b> 2:19  <b>instances</b> 5:23 8:19  9:12,22 29:5  32:24 33:2  <b>instead</b> 70:20 72:12  <b>instructions</b> 7:8  71:2  <b>instructs</b> 7:6  <b>intact</b> 32:5 43:2,4  <b>interested</b> 84:13</p>	<p><b>intermittent</b> 37:12  <b>intracranial</b> 10:3,6  15:7 16:2,6 19:16  20:19,22,25 21:2  21:4,12,21 22:3,6  23:14 28:9,24  29:3,9 32:15,16  32:19,25 34:6,19  39:14 40:16 42:2  42:4,8 45:5,8  46:10,16,19 48:19  48:21 49:5 52:17  57:24 58:2,5,7  62:19,22,23 64:14  65:4,9,20 66:2,19  67:25 68:11,17  70:10 74:17 76:24  77:3,8 79:2 80:2  82:10  <b>investigate</b> 24:15  <b>involved</b> 9:24  <b>involvement</b> 36:10  68:21 78:9  <b>irrespective</b> 30:17  <b>irritability</b> 37:11  46:13  <b>issue</b> 16:6  <b>issues</b> 9:24 19:8</p>
<p><b>G</b>  <b>gave</b> 7:22 10:21  16:4 56:21  <b>general</b> 12:7 38:9  77:19  <b>generally</b> 26:18,22  27:7,18 30:5  31:22 57:15 71:12  71:16  <b>gets</b> 23:11</p>	<p><b>H</b>  <b>H</b> 1:10,13 3:1,6  81:3 83:18 84:7  85:3,6  <b>halfway</b> 31:25  40:20 42:17  <b>hand</b> 7:3 23:11  31:23 75:24 84:15  <b>handouts</b> 16:8  <b>hands</b> 31:25  <b>handwriting</b> 38:3  <b>handwritten</b> 16:24  <b>happen</b> 78:1  <b>happened</b> 9:8 78:6  <b>happy</b> 6:20 8:1  <b>hard</b> 52:7  <b>harmless</b> 27:18  <b>having</b> 38:24 39:24  76:20 78:5  <b>head</b> 7:3 13:9 23:12  <b>headache</b> 20:18,21  38:24 45:21,24  58:21  <b>headaches</b> 16:5  37:12 39:14,16,17  39:25 40:10 41:2  41:8 46:14 47:8  47:13  <b>healing</b> 71:15  <b>health</b> 80:18  <b>hearing</b> 37:12  <b>help</b> 32:14 36:13  39:13 49:24</p>	<p><b>I</b>  <b>identification</b> 13:15  <b>identified</b> 81:10  <b>identify</b> 13:20  81:12  <b>illness</b> 9:10  <b>imagine</b> 76:15  <b>imagines</b> 31:3  <b>immediate</b> 51:25  <b>immediately</b> 69:13  <b>impairment</b> 60:19  <b>implies</b> 29:25 56:6  <b>important</b> 6:18  41:25  <b>impossible</b> 50:13  <b>impression</b> 45:3,8  45:10 46:18 74:5  75:3 77:1  <b>impressions</b> 45:2</p>	<p><b>J</b>  <b>January</b> 47:8,10,11  47:12  <b>JEANNE</b> 2:4  <b>job</b> 18:22  <b>joined</b> 14:16  <b>June</b> 14:16 53:22  54:13,18 55:3,5  60:20,20,21,24  70:2 71:19,24  72:8,13 73:16  74:16,21 76:8,13  <b>just</b> 13:20,21 15:17  16:1 21:25 24:3  27:24 30:18 31:11  33:18 39:9 42:23  50:4 52:1 55:17  61:7 64:9,23 80:6  80:7 81:2,17 82:2  82:3</p>	<p><b>K</b>  <b>Kaiser</b> 4:4,9  <b>Karen</b> 1:15 84:6,18  <b>kevin</b> 1:3 3:22 4:14  5:4 10:21 11:3  12:12 16:16 17:17  18:9 36:5,14,21  37:3,8,16 39:4,7  39:24 43:23 44:14  45:2 50:18,22  52:10 53:2,9,13  53:22 55:9 56:23  59:10,11 61:3,11</p>

63:11 65:14 68:6 68:9,10,11 69:1 70:7 71:10,19 73:16 74:6,20 75:1,7,21 76:8,13 79:22 80:8,19,21 Kevin's 43:16 65:1 70:18 73:9 74:10 76:2,10,23 77:15 77:18 79:14,16,20 79:25 80:1 key 52:15 Kids 16:18,25 KINKOPF-ZAJ ... 2:15 kiss 1:3,4 3:22 4:14 5:4 10:21 11:3 12:12 16:16 17:17 18:9 36:5,14 73:24 80:10 knew 63:7 72:20,21 know 6:19 12:8 14:1 15:15 19:9 26:5 29:13 31:8 36:23 40:11 41:10 44:4,16,19 49:6 50:22 53:7,13,15 53:16 55:7 56:12 60:5 67:18 70:3 71:6,8 74:8,8,23 78:19 79:9 82:5 knowledge 14:24 15:22 26:12 36:22 59:20 71:4,6 Kosmorsky 75:21 76:2 Kosmorsky's 17:10	like 6:23 13:10 14:4 15:13 16:11 27:16 36:8 55:19,20 56:14,15,20 57:5 64:8,9,16 73:14 73:14 75:9,20,20 78:24 81:23 82:8 82:9 likely 39:2 79:12 limited 75:10 line 5:18 38:23 72:19 83:5 listed 14:21 15:9,20 15:24 literature 17:23 little 41:7 52:25 78:15 LLP 2:20 LOESEL 2:20 33:8 34:11 35:22 65:17 69:8 82:14 long 39:24 44:17 49:22 55:5 69:18 longer 4:23 longitudinal 49:3 long-standing 79:10 long-term 21:10 49:4,11,17 64:6 look 22:15 23:24 24:2 30:2 32:21 36:1,12 49:25 73:6 looked 16:13,14 61:7 67:13 70:3 80:7 looking 22:11,16 23:22 32:18 49:20 49:23 70:20 75:10 81:15 looks 36:8 75:9,20 75:20 81:23 82:8 82:8 lose 57:16 58:3 59:11,15,17,19,20 78:8,12 loss 28:2 29:20 35:14 56:6,24 57:8,15,20,24,25 58:4,16 59:22,24 60:4 63:24 64:15 68:2,13,23 74:7 74:11,15 75:5 76:10,23 77:2,15 77:24 79:6,10 80:2,22 lost 30:8,10 66:9,14 66:16 78:17 lot 50:13 75:5 Luciano 36:18 37:8 37:14 47:21,24 48:5,17 53:9 69:21 71:7 76:10	76:13 79:25 80:4 Luciano's 17:9 46:21 47:7,24 53:17 lung 27:18 L.P.A 2:4,9  <b>M</b> M 1:15 2:4 84:6,18 made 40:2,5 58:20 79:5 main 3:19,23 4:1 12:13 major 74:6 majority 19:23 38:3 59:16 70:15 make 10:11 14:4 28:19 38:18 40:22 40:23,25 48:17 52:9,13 53:1 71:14,17 82:16 makes 65:6 82:5 making 54:3 manage 25:7,9,12 25:15 49:21 management 25:1 49:18 74:2 manner 66:19,23 many 5:11,15 7:18 8:12,15 9:13 18:22 29:19,19 35:6 58:12,12 62:10,24,24,25,25 65:18 66:5,5,10 68:3,9,10,15 March 84:15 marcotty 1:7 2:8 16:23 54:7,8,9 57:12 70:4 72:12 72:17,22,23 73:1 73:5,9,14 75:17 76:4,6 81:5 Marcus 75:12,13 margins 23:17 24:1 44:11 mark 15:14 marked 13:18 mark'd 13:14 85:10 material 18:24 matter 14:23,25 19:14 57:9 may 4:3 7:4 10:5 15:2 16:6 17:20 27:13,23 30:9 34:23 38:16 40:6 44:5 56:6 57:18 59:25,25 65:5 77:11,11 78:8,11 80:14,25 Maybe 20:6 33:18 Mazanec 2:9 mean 6:7 31:21 55:20 69:12	meaning 53:24 means 43:3 meant 50:3 mechanisms 59:24 medical 5:16,22,24 6:8,9,24 7:13 8:10 9:13 11:3 13:7 36:19 37:5 64:20 78:1,9 81:11 medical/legal 8:9 8:13,20 9:18,23 medicine 10:17 11:11 12:10 member 79:21 mentioned 15:2 16:1 24:4 39:8 40:4 47:1,21 Merit 1:16 met 55:6 metabolism 20:3 method 50:12 middle 80:15 midway 81:20 mild 23:8 44:6 54:5 72:1 mind 48:14 55:17 68:19,25 72:19 81:16 minor 1:3 minutes 23:13 74:2 Mishkind 2:4 missing 31:15 misstating 59:10 mitochondrial 14:8 mitochondrial 9:11 19:24,25 model 29:11 moderate 23:9 Monday 1:11 monitor 32:14 57:23 monitored 24:9,22 24:24 monitoring 32:11 month 40:22 months 4:8 23:15 24:19 40:1,13 47:16 58:12 62:10 62:24,25 65:19,22 66:5,10 70:1,15 71:17 mood 37:11 46:13 moot 54:23 more 14:7 18:18 50:11 58:9 75:24 79:11 morning 37:24 39:19 most 18:13,17 21:17 81:19 mother 1:4 motion 75:24 motions 7:3	movements 41:24 much 27:16 50:11 murder 5:21 must 24:15 myself 63:8,18 67:18 69:22 M.D 1:7,10,13 2:8 3:1,6 81:3 83:18 84:7 85:3,6  <b>N</b> N 85:1 name 3:9 7:15 8:2 10:13 81:6,9 named 5:25 6:3 84:7 natural 1:4 58:9 necessarily 19:4 29:17 need 34:2 54:22 57:23 needed 48:15 49:19 73:3 needs 34:16 49:4 negative 21:24 27:25 82:6,11 negligence 5:16,24 7:13,21,24 8:10 9:1 10:9 nerve 25:17 26:8,13 28:7,11 29:5,8,15 29:22,25 30:3,4 33:13,14,15,16 34:9,17 35:4,6,19 66:4 67:17,20,23 68:20,21 70:3,16 70:21 75:15 78:11 nerves 43:2,3 58:14 58:25 59:3 neurologic 9:6,9 16:5 22:24 28:15 29:2 58:23 neurological 22:17 neurologist 25:12 25:19 neurology 11:14,15 11:20 18:23 19:22 neurosurgeon 63:18,20 neuro-imaging 21:11 never 29:12,20 66:7 next 1:3 70:15 nice 18:22 night 41:7 Ninth 2:16,21 NL 42:19 43:7 nods 7:3 noises 37:13 38:24 39:9 41:3,8 45:22 none 15:4 26:12 74:19 noon 32:7
--	---	--	---	---

<p><b>normal</b> 21:6 30:5,5 41:16,22,24 42:18 43:2 49:15 54:1 57:9,13 58:25 60:14 64:17,19 70:3,16,17,20 <b>normally</b> 52:12 <b>nose</b> 31:24 <b>Notary</b> 1:16 83:24 84:6,18 <b>notation</b> 41:6 44:3 <b>notations</b> 38:18 <b>note</b> 5:17 16:24 18:14 19:1 24:12 26:2 27:1 33:9 34:10 37:22 38:2 38:4,5,22 40:1,12 40:20 41:6 42:17 47:7,11 48:1,25 58:20 60:25 61:13 61:18 64:4 74:13 74:24 77:5,7,9,10 77:13 81:15 83:3 <b>noted</b> 4:1,21,23 49:15 54:5 59:1 64:11 71:25 <b>notes</b> 16:13,14 18:6 18:9 37:21 49:13 61:8,8 <b>nothing</b> 50:19 75:24 84:8 <b>notice</b> 1:17 <b>November</b> 57:18 <b>number</b> 3:16 15:17 15:23 21:17 29:2 29:18 35:3 36:3 81:21 <b>numbered</b> 15:15 <b>numbers</b> 31:6 <b>numerous</b> 14:21 <b>nurse</b> 36:25 47:24</p>	<p><b>occur</b> 22:6,7 60:7 68:4 <b>occurred</b> 54:25 55:1,2,4,5,7 60:11 <b>occurring</b> 24:16 39:18 42:13 60:4 <b>occurs</b> 57:22 <b>October</b> 13:2 74:22 74:24 75:17 77:6 77:13 79:14 84:19 <b>odd</b> 73:19,22 <b>offer</b> 26:21 <b>office</b> 2:5 31:19 57:13 81:11 84:15 <b>offices</b> 1:18 <b>often</b> 18:19 20:4 <b>ohio</b> 1:1,17,20 2:6 2:11,17,22 3:2,12 10:17,24 11:1,6 84:3,6,15,18 <b>okay</b> 58:22 61:17 61:20 71:18 82:19 <b>once</b> 9:18 24:17 64:24 65:12 68:5 <b>one</b> 2:16 4:8,8 5:20 5:20,21 7:20,22 8:17,17 19:9 20:6 20:18,21,23,24 21:16,20 22:2 24:14 29:8 31:2,2 31:3,3,23 32:13 32:13,14 33:14 34:25 35:2,2,12 35:23,24,24,25 38:4 44:7 50:8 51:19,20 57:20 58:24 59:24 61:8 61:14 65:21 68:6 70:25 71:14,17 72:20,22 77:24 78:17 81:21 <b>ones</b> 5:25 80:7 <b>only</b> 12:9 63:24 68:8,12 77:19 <b>open</b> 65:14 <b>operative</b> 45:16 <b>ophthalmologic</b> 22:14,22 69:17 <b>ophthalmologist</b> 25:1,9,20 26:10 44:5 49:21,24 50:7,17 53:16,21 63:4,7,11,13,23 64:3 69:5 72:21 75:18 <b>ophthalmologists</b> 25:4 50:10,14 <b>ophthalmology</b> 69:24 70:23 71:2 <b>ophthalmoscope</b> 22:10,12,17 35:1 35:13 <b>opinion</b> 9:2 26:21</p>	<p>36:18 37:14 46:19 49:10,12 56:10,11 56:23 60:13 66:17 66:22 70:14 76:22 78:14 79:3,8 <b>opinions</b> 8:21 77:11 <b>opth</b> 35:24 <b>optic</b> 21:22 22:4,5 23:17 25:17 26:8 26:12 28:5,6,7,10 28:12,14,17,21,21 28:25 29:1,5,7,8,9 29:12,15,20,21,25 30:3,4 33:6,13,14 33:15,16 34:9,17 34:24,25 35:4,6 35:11,12,18,19 36:2 54:5,25 57:20 58:13 60:21 66:4 67:17,20,23 68:13,16,20,21,22 70:2,16,20,21 72:1 75:10,15 76:14 78:11 <b>order</b> 29:6 <b>organization</b> 40:20 <b>other</b> 4:19 5:5,20 5:23 8:4 10:23 11:6 12:4 13:5 18:3,9 28:12 36:3 39:6 43:18 47:5 51:8 53:18 65:14 70:25 72:25 75:18 75:19 76:17 79:21 80:8,11,11,25 <b>others</b> 6:9 43:20 <b>otherwise</b> 6:21 58:22 84:13 <b>ought</b> 50:4 <b>ourselves</b> 32:1 <b>out</b> 4:4,9 49:24 <b>outpatient</b> 17:2,3 18:8 38:1 52:19 52:24 53:2 71:13 <b>outside</b> 10:25 16:17 29:11 <b>outstretched</b> 31:25 <b>over</b> 6:14 16:13,14 49:21 58:11 66:5 69:10,10 70:14 82:16 <b>overviewing</b> 18:22 <b>own</b> 38:15 43:15,17 48:14 <b>o'clock</b> 1:21 32:7,7 32:8 82:23</p>	<p><b>paler</b> 30:5 <b>PAMELA</b> 2:20 <b>panic</b> 81:23 <b>parent</b> 47:17 77:25 <b>parents</b> 47:17 73:10 74:10 75:4 77:15 77:18,22 79:14,16 79:20 <b>part</b> 14:11 22:17,23 49:3,17 51:5 57:25 75:3 77:6 81:25 <b>partial</b> 75:12 <b>participated</b> 19:13 <b>particular</b> 4:22 11:11 19:7,8,11 26:1 45:13 73:4 <b>parts</b> 35:16 43:18 <b>party</b> 84:13 <b>pass</b> 11:22 <b>past</b> 7:12 54:9 72:18 81:23 <b>patient</b> 20:6 24:9,25 25:17,25 26:7,16 26:18,25 29:4,12 29:21 31:22,24 32:1,3,8,11,19,25 33:3,5,20,21 34:7 34:8,16,22,23 38:6,10 71:16 79:18,18 <b>patients</b> 4:1,3 19:23 20:5 21:9 25:3 26:12 28:15 29:18 32:14 34:1 35:6 57:23 58:1 59:16 68:10,10,14,15,19 68:23 70:16 <b>patient's</b> 32:6,22 <b>Patterson</b> 1:15 84:6 84:18 <b>pediatric</b> 19:22 <b>pediatrician</b> 10:11 <b>pediatrics</b> 11:14,17 <b>pending</b> 7:25 <b>perceive</b> 31:1 32:4 32:9 <b>percent</b> 54:1,2 <b>perform</b> 22:14 <b>period</b> 5:3 13:1 46:3 60:8 69:18 <b>peripheral</b> 32:22 <b>periphery</b> 31:7 32:9 <b>permanently</b> 42:9 <b>persist</b> 65:18 <b>persisted</b> 45:18,20 65:13 <b>persistent</b> 27:23 28:1,13 30:11 32:11 33:4,20 62:14 70:7 <b>person's</b> 53:18 <b>perspective</b> 25:23</p>	<p><b>phone</b> 76:5,6 80:14 <b>physical</b> 21:15 41:12,17 42:5,6 42:11 44:25 75:7 75:9 <b>physician</b> 6:10 13:6 24:15 34:3 50:9 <b>physicians</b> 18:1 65:11 <b>picture</b> 31:4 <b>place</b> 12:9 21:6 56:7 57:8 78:10 84:12 <b>placed</b> 31:25 53:24 <b>placement</b> 65:23 <b>placing</b> 78:20 <b>Plaintiff</b> 7:16 8:21 9:19,21 10:10,14 <b>plaintiffs</b> 1:5,14 2:3 13:13,19,20 85:9 <b>plan</b> 47:20 48:11 71:9 72:24 74:2 <b>PLEAS</b> 1:1 <b>please</b> 3:8 15:12,14 15:17 26:2 36:12 56:24 57:6 <b>plus</b> 4:1,21 43:24 44:1,7,8,8,9 58:22 <b>point</b> 6:23 7:4 8:3 46:17 51:25 52:2 52:15,24 54:23 56:7 57:17,17 59:12 62:2 63:1 65:7 66:8,16 69:16,19 70:12 71:10,14 78:6,12 79:24 <b>pointing</b> 82:2 <b>points</b> 32:3 <b>portion</b> 23:3 31:4 <b>position</b> 58:8,10 <b>positions</b> 13:3 <b>possibilities</b> 78:7 <b>possibly</b> 8:18 14:6 50:20 <b>practice</b> 10:17 12:9 18:12,19 20:4 22:13 31:17 57:22 58:1 64:21 76:18 <b>preparation</b> 17:7 <b>prescribe</b> 19:4 <b>present</b> 24:4,8 43:11,13 44:18 70:12 79:15 <b>presentation</b> 16:9 <b>presentations</b> 15:24 <b>preserved</b> 32:21 <b>pressure</b> 10:3,6 15:7 16:2,6 19:17 20:15,20,22,25 21:2,4,8,12,18,21 22:3,6 23:15 28:9 28:24 29:3,10</p>
<p><b>O</b> <b>oath</b> 6:17 <b>object</b> 69:9 <b>objection</b> 5:17,18 7:5 18:14 19:1 24:12 26:3 27:1 33:7,8,9 34:10,11 34:12 35:21,22 64:4,10,11 65:16 65:17 69:7,8 79:7 <b>objects</b> 31:1 <b>observations</b> 23:24 <b>observe</b> 23:3,21 <b>obtain</b> 11:16,19 71:2 <b>obtained</b> 38:12 47:15,16 53:23 <b>obviously</b> 77:23 78:16 <b>occasional</b> 4:20 <b>occasions</b> 26:10</p>	<p><b>occur</b> 22:6,7 60:7 68:4 <b>occurred</b> 54:25 55:1,2,4,5,7 60:11 <b>occurring</b> 24:16 39:18 42:13 60:4 <b>occurs</b> 57:22 <b>October</b> 13:2 74:22 74:24 75:17 77:6 77:13 79:14 84:19 <b>odd</b> 73:19,22 <b>offer</b> 26:21 <b>office</b> 2:5 31:19 57:13 81:11 84:15 <b>offices</b> 1:18 <b>often</b> 18:19 20:4 <b>ohio</b> 1:1,17,20 2:6 2:11,17,22 3:2,12 10:17,24 11:1,6 84:3,6,15,18 <b>okay</b> 58:22 61:17 61:20 71:18 82:19 <b>once</b> 9:18 24:17 64:24 65:12 68:5 <b>one</b> 2:16 4:8,8 5:20 5:20,21 7:20,22 8:17,17 19:9 20:6 20:18,21,23,24 21:16,20 22:2 24:14 29:8 31:2,2 31:3,3,23 32:13 32:13,14 33:14 34:25 35:2,2,12 35:23,24,24,25 38:4 44:7 50:8 51:19,20 57:20 58:24 59:24 61:8 61:14 65:21 68:6 70:25 71:14,17 72:20,22 77:24 78:17 81:21 <b>ones</b> 5:25 80:7 <b>only</b> 12:9 63:24 68:8,12 77:19 <b>open</b> 65:14 <b>operative</b> 45:16 <b>ophthalmologic</b> 22:14,22 69:17 <b>ophthalmologist</b> 25:1,9,20 26:10 44:5 49:21,24 50:7,17 53:16,21 63:4,7,11,13,23 64:3 69:5 72:21 75:18 <b>ophthalmologists</b> 25:4 50:10,14 <b>ophthalmology</b> 69:24 70:23 71:2 <b>ophthalmoscope</b> 22:10,12,17 35:1 35:13 <b>opinion</b> 9:2 26:21</p>	<p><b>P</b> <b>P</b> 77:6 <b>page</b> 15:18 16:4 40:21 42:18,20,21 42:24 61:19 81:20 82:1 83:3,5</p>		

<p>32:15,17,19,25 34:6,19 39:14 40:16 42:3,4,8 45:6,9 46:10,16 46:19 48:19,21 49:5 52:17 57:24 58:2,5,7,10,14 60:1,3 62:17,19 62:23,23 64:14 65:5,9,20,24 66:2 66:6,12,12,15,20 67:25 68:11,17,20 68:24 70:10 74:18 76:24 77:3,4,8 78:10 79:2 80:3 82:10 pretty 46:25 prevent 29:7 previously 40:13 56:22 57:180:7 prior 47:9 57:9 67:9 78:8,13 79:18 priori 59:19 privileges 12:1,3,12 12:15,19 PRN 73:2 probably 4:7 28:11 37:5 52:23 55:5 67:11 74:14 problem 24:5,5 39:13 42:13 49:18 58:18 problems 20:17 36:3 37:10,11,16 39:10,11 40:10,12 41:9 62:14 73:21 procedure 3:3 26:1 26:19 45:16 46:11 46:14,24 48:12 53:25 57:10 58:17 60:10,12 62:9 63:3 64:25 65:12 66:6,18 67:10 78:13,19,20 79:4 proceed 26:23 proceedings 8:10 process 23:10 24:20 28:4,7,8,8,10 42:10 54:25 57:19 63:25 66:1,3 processes 21:17 34:1 65:25 professional 4:16 4:18 5:5 prognosis 74:2 progressing 24:10 properly 64:17 protected 78:16 provide 4:17,18 8:2 38:11 71:1 provided 3:2 6:25 9:2 13:17 80:18 providers 80:18</p>	<p>providing 5:4 8:20 pseudotumor 27:12 29:10 58:2 psychological 17:6 39:12 Public 1:16 83:24 84:6,18 publication 19:7 publications 14:2 14:22 15:3,19 pulsations 24:2 44:11 pupil 75:12,13 pupils 59:1 purpose 64:18 purposes 13:14 49:8 pursuant 1:17 put 46:20 48:25 49:16 73:2 74:1 77:9 putting 79:1 p.m. 1:21 82:23</p> <hr/> <p><b>Q</b></p> <p>qualified 84:7 question 6:12,20,22 7:6 8:6 10:6 11:8 12:23 21:23,24 22:19 23:7 25:16 26:5,19 27:25 30:20 31:9,9 33:11,16,19 34:14 44:20 55:15 56:2 56:4,5,6,22,25 57:7 60:6 61:1 62:15,21 63:10 65:6 67:19,21 77:24 questioned 12:16 questions 6:18 55:12 75:5 80:25 82:14 question-and-ans ... 6:17 quickly 52:8 quite 27:13 quote 56:11</p> <hr/> <p><b>R</b></p> <p>raise 35:18 range 44:6 69:24 rape 5:21 rapid 58:15 59:21 rapidity 23:9 rare 78:16 rarely 57:21,25 Raskin 2:9 rather 23:5 reactive 59:2 read 33:12 34:15 55:12,14 57:22 64:18 81:9,14,18</p>	<p>81:18,19 82:1,16 83:2 realized 57:3 really 29:13 33:17 46:17 49:14 73:5 reason 6:6 72:11,16 75:1 reasonable 26:23 74:3 77:25 recall 10:1,7,8,13 16:7,21,23,24 17:19 25:6 38:8 68:12 70:22,25 76:3,5,6,11,16,19 77:17,20,22 79:17 79:19,20,22 80:9 80:15 81:13 receive 53:10 received 16:16 53:13 69:4,16 receives 64:20 Recess 56:19 recollection 36:5,25 74:12 recommend 25:21 82:17 recommendation 26:15 53:14,17,18 53:19 record 13:7,21 33:12 34:15 41:10 55:14 records 6:24 17:2,4 17:16,18,19,21 18:7,8 36:13 81:11 recovered 69:20 recur 21:2,8,12 reduce 79:1 reduced 84:9 refer 6:24 18:18 40:23 47:21 63:6 74:24 referenced 42:16 referencing 18:9 referred 20:8 24:25 25:3 26:7 29:12 37:8 38:23 42:14 63:3 64:2 72:12 referring 15:14 40:24 42:7 43:5 48:11 52:3 56:4 58:19 72:25 reflect 38:5 55:16 56:12 57:3 77:10 regard 30:11 39:7 56:22 63:10 79:5 regarding 36:19 37:14 49:13 56:10 75:5 76:17 77:11 Registered 1:16 regular 4:6 related 27:7 66:3</p>	<p>relative 84:13 relatively 60:8 relevance 19:8,11 relevant 14:6 33:18 38:15 59:25 65:23 65:24 reliable 18:13,17,25 19:4 relief 46:1,25 8:6,14 60:1,3 65:19 77:4 78:10 79:11 relieve 29:6,9 30:18 39:13 48:18,20 65:14 66:19 relieved 46:7 62:8 62:17 65:24 66:6 66:13,15 relieving 67:25 rely 48:16 relying 45:9 remain 21:4 remained 70:13 remaining 33:23 remember 4:9 5:12 36:6,7,8,9 47:23 48:13 52:11 53:4 53:7,12 75:4 rendered 3:21 4:14 5:4 11:2 12:11 repeat 6:20 33:10 51:10,10 repeated 51:16 rephrase 6:20 21:23 21:25 27:25 report 38:16 reporter 1:16 7:2 representing 31:5,6 REQUESTED 83:5 require 21:10 required 7:5 reread 57:2 research 19:13 resident 38:6,8,9,11 38:20 40:24 41:22 41:23 43:11,13 50:9 51:2,3,12,13 51:20 79:17,19 81:7,9,12,14,20 residents 18:20 38:4 81:12 resident's 38:17 40:20 42:17 81:15 resolution 70:18 resolve 62:16,25 resolved 70:20 resolving 24:11,23 33:23 63:5 respect 33:17 restate 31:10 result 21:17 27:23 28:1,6,16,16,21 29:1 32:25 34:2 34:18 35:4 53:14</p>	<p>53:16 58:15 59:22 68:2,13,16 75:6 resultant 20:17 34:20 resulting 34:6 resume 13:18 return 73:2 review 16:20 17:3,6 17:23 38:15 78:5 78:6,7 reviewed 16:12 17:11,12 80:8 revoked 11:7 12:16 Rhone-Poulanc 4:23 right 37:13 38:24 42:21 43:8 56:17 75:11 78:5 82:15 right-sided 39:18 risk 29:15 64:14 67:16,20,23 78:21 78:22,22,23 risks 78:21 Road 2:11 3:12 Roetzel 2:14 room 16:19 51:13 79:19,22 Rorer 4:23 routinely 51:5 Row 2:10 rule 38:9 rules 3:2 6:15 Ryder 2:9</p> <hr/> <p><b>S</b></p> <p>same 12:24 67:8 saw 16:22 39:3,7,25 41:13 44:13,15,16 47:19 49:9,18 50:23 54:11,12,17 54:18,24 55:2,9 60:14,19 61:4,16 61:20 62:2,4,19 64:1 66:24 67:2,4 67:6,15 71:19,24 72:3,13 73:16 74:5,16,20,23 75:17,21 76:13 80:12 saying 28:20 64:24 73:3 rays 38:1 40:21 42:18 43:7 48:9 77:14 82:3 scan 46:17 71:17 scurrying 21:6 scenario 34:18 scheduled 71:21,23 school 54:4 64:16 seal 84:15 second 2:5 78:18 secondary 68:23 76:23 77:7 80:2</p>
---	---	--	--	---

<p>see 16:10 19:23 20:4 23:16 30:1,2 32:8 35:1,2,14 36:1,16 37:1,3,21 37:22 38:6 39:1 42:23 43:1,2 54:6 54:13,16,22 57:25 60:4 61:12,15,20 71:12,16 73:4,8 73:14 75:2 80:8 seeing 3:25 4:3 17:19 43:1 45:12 64:7 75:10 79:18 <b>seem</b> 33:17 <b>seen</b> 17:9,17,20 29:1,23 52:14 53:15,20,22 54:8 54:19 63:8,17 67:9 68:3,15 70:2 70:19 72:17 76:8 79:17 <b>sees</b> 21:16 35:13 38:10 segments 31:14 send 26:17 82:21,21 sent 54:6,7 70:4,9 separate 66:3 series 67:22 served 13:4 service 17:16 services 4:16,18 5:5 session 6:17 set 1:20 77:11 84:9 84:14 seven-year-old 50:13 severe 23:9 44:7 77:24 severity 44:9 sharp 39:19 sheath 29:9,13 she'll 12:23 shift 58:7,15 59:21 shifting 68:1 short 60:8 shot 23:11 Show 42:20 showed 67:7 shown 17:21 shunt 53:24 65:22 70:13 78:20,21,23 shunted 48:15 shunting 46:23 48:12 60:9,12 62:9 63:3 64:25 65:12 66:18 67:10 78:13 79:4 sign 22:5 23:2 27:16 27:17 28:3 30:15 65:3 signature 2:18 16:18 81:13,14 82:24</p>	<p>significant 41:16 signs 20:19,21,23 20:24 21:21 22:2 22:25 23:22 24:3 33:5 34:9 44:21 45:4 74:17 similar 67:13 since 14:18 17:25 44:3 single 18:16 single-family 3:14 sit 19:6,10 36:5 situation 23:14 36:19 38:9 57:4 59:16 73:12 78:17 six 70:19 81:23 Skylight 2:5 sleeping 41:6 slow 66:4 slowly 58:12 small 67:23 smaller 30:4 Solon 2:11 some 6:14 7:4,11 8:9 15:3 16:14,16 16:22 17:15 28:6 29:5 32:24 33:2 36:1,9 43:19 46:1 46:2 47:2 52:2,24 53:18 55:18 56:7 57:17 59:12 61:7 62:13 64:15 69:19 69:23 71:14 72:1 74:6,11,14 76:14 78:12 81:1 someone 23:11 35:14 53:8 54:17 72:12 something 9:8 23:18 25:11,14,18 25:20 35:12 38:19 50:4 51:4 52:1 57:3 77:25 78:23 82:7 Sometime 70:1 sometimes 50:12 52:22 somewhere 80:15 son 77:23 soon 60:3 73:8,14 sooner 79:4 sorry 39:23 40:7 sounding 64:8 Southwest 16:20 space 31:2 32:3 speak 36:20 73:23 80:10 speaking 45:21 46:15 special 11:15 specialty 72:19 specifically 15:6 30:16 43:20</p>	<p>specified 84:12 spent 74:3 split 8:25 spoke 67:24 <b>SS</b> 84:3 stable 24:10 33:23 staff 13:6 14:16 stage 23:19 stand 48:2 81:16 stare 31:24 start 40:9 41:8 started 40:12 47:9 47:13,14 state 1:17 3:8 10:17 11:7 38:23 77:7 84:3,6,18 stated 56:11 statement 59:14 73:13 states 10:23 stating 59:12 statute 1:15 stay 22:21 stenotypy 84:9 steroid 69:20 still 7:5,25 43:1 62:18 63:2 66:25 72:1 stipulations 1:18 stopped 4:9 straight 54:3 Street 2:5,16,21 stroke 28:10 structure 20:16 structures 29:23 59:22 68:1 subdural 48:15 subject 14:22,25 19:14 subjects 15:25 Subscribed 83:20 subsequent 66:14 66:16 76:20 subspecialize 19:21 suffered 80:22 suggested 47:24 suggests 9:10 Suite 2:5 summary 17:12 Sun 16:18,25 support 45:7 sure 4:4 6:15 28:19 55:19 56:12 71:14 71:17 82:16 surgeon 25:7 26:18 63:8,24 78:25 surgeons 71:12 surgery 9:6,7 20:8 37:10 46:1,21 47:1,3,3,22,25 48:5,10 52:4,5,5,7 52:21 60:9 61:23 61:25 64:2</p>	<p>surgical 26:19 46:11,14 53:24 57:10 58:17 78:18 surrounding 56:3 suspended 11:7 12:16 swelling 21:22 22:3 22:5 swollen 44:10 sworn 3:3 83:20 84:8 syllabus 16:8 symptomatic 20:7 symptoms 23:22 41:1 45:18,20 46:1,3,4,8 47:2,5 systems 44:5</p> <hr/> <p><b>T</b></p> <p>take 7:3 23:15 24:18 55:18,25 56:15 62:10,24,25 73:6 taken 1:15 5:9 6:7 8:5 9:14 56:7 68:9 82:17 84:12 takes 21:6 taking 12:24 talk 6:16 16:4,4 76:12 talked 51:11 talking 7:10 14:6,10 56:9 talks 14:7 taper 69:21 techniques 32:14 tell 7:15 16:11 18:20 39:6 41:19 42:15 44:24 50:1 54:21 73:6,20,24 76:13 77:20 telling 51:16 tells 32:3 ten 8:14,24 9:15 10:7 tend 44:6 Tenth 2:16 term 22:22 49:22 65:5,10 terms 68:22 terrible 78:17 test 32:6 51:1 testify 84:8 testimony 9:2,16 17:7 84:9,10 testing 15:21 16:3 30:24 31:12,13,16 31:18,19 32:10 34:22 35:9,15,18 42:15 43:9 48:23 49:2 50:7 52:10 52:14,18 53:11 54:14 60:23 64:3</p>	<p>72:8 tests 35:3 51:18 textbook 18:11,16 19:3,5 textbooks 57:21,23 Thank 7:9 12:25 56:18 82:13,22 their 26:14 31:23 31:23 34:3 42:9 58:3 59:17 68:20 68:20,21 77:23 81:13 thereof 24:2 thing 24:15 81:19 things 41:3 51:9,10 52:7 think 8:17 16:19,22 18:21 26:9 33:24 37:23 42:3 44:6 46:2 47:20 49:3 56:8 57:8 64:5 69:24 79:9 80:5 though 24:21 59:7 thought 40:4 41:20 42:2 46:22 three 41:21 43:23 43:24 44:1,1,8,9 65:21 three-line 61:18 through 1:3 13:1 42:10 58:25 64:5 81:10 83:3 throughout 31:1,2 time 3:21 4:13 5:3 10:21 11:2 12:24 13:1 14:18 36:14 37:3,18 38:14 39:3 42:13 46:3 47:13,13,17 49:9 49:15,19 50:23 53:23 54:11,12 56:7 57:17,17 59:12 60:8,9 61:2 61:12 62:2 63:1 67:15 68:6,8 69:18,23 70:5 72:8 73:4 74:4,18 75:17 78:12 79:20 79:23 84:12 timed 37:23 timely 10:11 66:18 66:23 times 5:11,15 8:12 8:24 9:13 68:3 timing 78:18 titles 13:5 today 14:7,10 19:6 19:10 36:6 67:21 together 26:22 told 33:24 37:20 42:11 53:6 54:22 72:6 tone 41:25</p>
--	--	---	--	--

<p><b>top</b> 42:23  <b>topics</b> 18:22  <b>TOSTI</b> 2:4 3:7 64:7  80:24 82:22 85:4  <b>Tower</b> 2:5  <b>training</b> 14:12  <b>transcribed</b> 84:10  <b>transcript</b> 82:16  83:2  <b>transcription</b> 84:10  <b>transfer</b> 46:20 48:4  48:5  <b>transpired</b> 77:12  <b>treat</b> 24:17 27:21  30:13 48:2 52:16  63:23,24  <b>treatable</b> 24:17  <b>treated</b> 24:18  <b>treating</b> 6:10 65:7,8  65:9,11  <b>treatment</b> 15:4  24:19 30:12,21,22  36:10 45:17 64:25  65:14 78:25  <b>treatments</b> 30:16  <b>trial</b> 9:16 10:4,9  45:19 46:22  <b>tried</b> 40:21  <b>triggered</b> 39:19  <b>true</b> 4:13 12:11  21:20 27:22 38:14  84:10  <b>truth</b> 84:8,8,8  <b>try</b> 72:18 79:1  81:18,18 82:3  <b>trying</b> 52:21  <b>tumor</b> 10:5,12 27:9  27:11 28:8 68:20  68:22  <b>tumors</b> 19:24 68:19  <b>two</b> 4:8 8:18 14:9  35:15 40:1,13  44:8 47:9,16  51:18 54:1 58:25  65:21,22,22,25  71:14,17  <b>two-month</b> 47:4  <b>two-thirds</b> 61:19  <b>TX</b> 48:2  <b>type</b> 17:22 34:7  40:23 43:8 48:10  62:13 69:23 70:7  71:1  <b>types</b> 4:13  <hr/> <b>U</b>  <hr/> <b>Ulmer</b> 2:20  <b>ultimate</b> 78:13  <b>ultimately</b> 68:1  <b>uncomfortable</b>  55:22  <b>under</b> 1:14 6:17  36:14 42:25 48:1</p>	<p>73:12 77:6  <b>undergo</b> 25:17,25  <b>undergone</b> 21:9  67:22  <b>underlying</b> 9:10  24:20 25:13 27:8  27:10,20 28:4,15  28:18 30:13 34:1  34:3,5 36:2 52:16  63:24  <b>underneath</b> 48:7  <b>understand</b> 6:18,19  7:7,9 30:20 33:18  64:24  <b>understanding</b>  28:19 37:7,9  40:15  <b>understood</b> 6:22  <b>underwent</b> 9:4 66:4  <b>unique</b> 68:25  <b>unless</b> 7:6  <b>unquote</b> 56:12  <b>unrelated</b> 14:9  <b>until</b> 12:22 46:17  <b>updated</b> 13:24  <b>upset</b> 77:23  <b>up-to-date</b> 13:25  <b>use</b> 32:14 44:5,7  65:10  <b>used</b> 21:24  <b>using</b> 22:10,16 35:1  35:2  <b>Usually</b> 21:13  <hr/> <b>V</b>  <hr/> <b>vast</b> 59:16 70:15  <b>veins</b> 24:2  <b>venous</b> 44:11  <b>verbally</b> 7:2  <b>very</b> 18:21 22:7  27:16 35:15 41:6  54:21 78:15,16  81:25  <b>visible</b> 29:22  <b>vision</b> 28:2 30:8,9  32:23 37:16,20  38:24 39:9,15,15  40:10 41:2,9  45:22 47:14 49:14  56:24 57:9,17  58:3 59:12,15,17  59:19,20,22 60:4  60:14 64:17,19,19  66:8,14,16 68:2  73:17,21 74:6,11  74:15 75:22,23  76:2,10,23 78:8  78:12,17 79:6  80:1,22  <b>visit</b> 16:19 37:18  38:1,5,13 47:18  55:10 72:9 73:2  74:21 75:4</p>	<p><b>visits</b> 80:12  <b>visual</b> 15:21 16:2  29:20 30:1,6,24  30:25 31:3,5,7,11  31:16,18,19 32:5  32:6,10,22 33:1  34:21,24 35:1,3,5  35:7,8,10,13,14  35:17,23,25 41:22  42:14,19 43:7,8  48:8,9,23 49:2,6  49:15,25 50:2,6  50:10,15,20,23  51:18 52:10,13,17  53:10 54:13 56:6  57:7,13,15,20,24  57:25 58:4,16  59:6,24 60:22,23  61:1 62:13 63:23  64:3,15 68:13,23  70:17 72:7 75:5  77:1,14,24 79:9  <b>vitae</b> 13:24 14:20  15:10,25  <b>voice</b> 73:17  <b>vs</b> 1:6  <hr/> <b>W</b>  <hr/> <b>wait</b> 12:22  <b>waive</b> 82:20  <b>waived</b> 82:24  <b>want</b> 6:14 22:21  28:19 35:24,25  42:23 55:25 64:2  64:23 73:8 81:17  81:18  <b>wanted</b> 37:14 52:1  73:4,5  <b>wasn't</b> 13:11 48:14  49:14  <b>water</b> 55:18  <b>way</b> 50:5 61:19  70:25 73:3 80:22  <b>ways</b> 81:11  <b>weeks</b> 47:9 54:2  60:12 65:19,22  70:19 71:14 81:24  <b>weight</b> 46:9  <b>well</b> 8:24 17:1 32:9  32:21 37:12 47:1  50:15 51:7 52:20  54:21 57:21 59:4  63:10 69:12 71:15  77:5 82:3  <b>went</b> 10:9  <b>were</b> 3:25 5:4,15,23  5:24,25 6:10 7:10  8:20 10:20 17:1  31:14 36:23 37:2  37:3,20 39:3,6,16  39:17,19,21 40:9  41:16,19,24 43:11  43:21 44:21 45:2</p>	<p>45:4,9 48:11,15  49:10,20 50:16  52:3 57:13 58:8  59:2,3 65:8,9  74:17 77:23  <b>weren't</b> 43:19 51:13  <b>West</b> 2:5  <b>we'll</b> 32:6  <b>we're</b> 56:8 78:4  <b>we've</b> 39:9 64:5  80:7  <b>whatnot</b> 16:24  <b>wheezing</b> 27:16,17  <b>WHEREOF</b> 84:14  <b>whole</b> 81:19 84:8  <b>wiggle</b> 32:2,6  <b>wiggling</b> 32:4  <b>witness</b> 6:8 82:19  84:14  <b>word</b> 15:2 81:22  82:1,2  <b>words</b> 51:8 76:18  81:17  <b>work</b> 4:20,24  <b>working</b> 78:22  <b>worried</b> 49:14  <b>worse</b> 39:18 40:3,5  <b>worst-case</b> 34:18  <b>wouldn't</b> 35:18  51:10 71:8  <b>wound</b> 71:15  <b>write</b> 47:18  <b>written</b> 18:21 61:14  71:2  <b>wrong</b> 78:1,24  <b>wrote</b> 61:8 81:21  <hr/> <b>X</b>  <hr/> <b>X</b> 85:1  <hr/> <b>Y</b>  <hr/> <b>year</b> 7:13,19,23  8:15,23 9:3 20:6  <b>years</b> 10:7 29:19  58:12  <b>young</b> 30:6  <hr/> <b>I</b>  <hr/> <b>I</b> 13:14,19,20 83:3  85:10  <b>1st</b> 14:16  <b>10:30</b> 37:23  <b>100</b> 2:10  <b>106</b> 3:17  <b>12</b> 15:18 43:2,3  58:25  <b>13</b> 85:10,10  <b>1300</b> 2:21  <b>1375</b> 2:16  <b>14</b> 81:8,16,20  <b>14th</b> 36:15,17 37:22  39:8 41:13 43:9  44:17 45:2 47:15</p>	<p>47:19 49:10 51:19  54:12,17 55:10  60:16,17 61:12,13  15 16:4  <b>15th</b> 53:25 57:10  65:23 74:24 75:18  77:6,13 78:14  79:14  <b>16</b> 2:6 15:18  <b>16th</b> 59:1 60:15  61:16,21 62:2  <b>1660</b> 2:5  <b>17th</b> 59:1 61:9,13  61:14 62:4,20  66:24  <b>18th</b> 58:20 67:2,4,6  67:16,19 69:2  70:6,9 71:10  <b>1989</b> 11:18 14:16  <b>1990</b> 11:21  <b>1995</b> 16:4  <b>1997</b> 57:18 66:13  <b>1998</b> 3:25 13:2  36:15 47:8 53:22  53:25 57:11 61:9  74:25 81:8  <hr/> <b>2</b>  <hr/> <b>2</b> 43:2,3  <b>2:10</b> 1:21  <b>20</b> 74:2  <b>20120</b> 75:23  <b>2000</b> 13:24 83:21  84:15  <b>2001</b> 1:11  <b>2004</b> 84:19  <b>216</b> 2:17,22  <b>22</b> 47:11  <b>22nd</b> 47:8  <b>241-2600</b> 2:6  <b>248-7906</b> 2:12  <b>26</b> 1:11  <b>26525</b> 3:12  <hr/> <b>3</b>  <hr/> <b>3</b> 85:4,7  <b>3:00</b> 32:7  <b>33</b> 16:5  <b>34305</b> 2:11  <hr/> <b>4</b>  <hr/> <b>4:15</b> 82:23  <b>402393</b> 1:8  <b>440</b> 2:12  <b>44113</b> 2:6  <b>44114</b> 2:17,22  <b>44122</b> 3:13  <b>44139</b> 2:11  <hr/> <b>5</b>  <hr/> <b>5th</b> 84:15  <b>50150</b> 8:25</p>
--	---	---	--	---



<div>6</div> <div>6 13:24 85:4</div> <div>6:00 32:7</div> <div>621-8400 2:22</div> <div>623-0150 2:17</div> <div>660 2:5</div> <div>7 84:19</div> <div>8</div> <div>8th 47:10,12</div> <div>81 85:7</div> <div>82 83:3</div> <div>9</div> <div>9th 53:22 54:13,18</div> <div>55:3,5 60:20,21</div> <div>60:24 70:2 71:19</div> <div>71:25 72:8,14</div> <div>73:16,24 74:6,16</div> <div>74:21 76:13</div> <div>9:00 32:8</div> <div>90 53:25</div> <div>900 2:21</div> <div>9500 1:19</div> <div>98 36:17 37:23 39:8</div> <div>43:9 44:17 51:19</div> <div>54:12,13 55:3,5</div> <div>55:10 60:15,17</div> <div>66:15 70:6 71:11</div> <div>71:20 74:21 75:18</div> <div>76:13 77:6,13</div> <div>79:14</div>				
---	--	--	--	--

## CURRICULUM VITAE

### BRUCE HOWARD COHEN, M.D.

Home Address: 26526 Amhearst Road #106  
Beachwood, Ohio 44122  
(216) 591-1246

Office Address: The Cleveland Clinic Foundation  
S-71  
9500 Euclid Avenue  
Cleveland, Ohio 44195  
(216) 444-9182  
(216) 445-9139 (fax)  
E-mail cohenb1@ccf.org

Date of Birth: April 9, 1956

Place of Birth: St Louis, Missouri

Family: Son-Jordan Benjamin Cohen, born 10-01-92  
Daughter-Arielle Gaila Cohen, born 4-6-94

Education and Training:

Pediatnc Neuro-Oncology Fellowship.  
Children's Hospital of Philadelphia  
34th & Civic Center Blvd  
Philadelphia, PA 19104  
July 1, 1987-May 31, 1989

Pediatric Neurology Fellowship:  
Neurological Institute and Babies Hospital  
Columbia-Presbyterian Medical Center  
630 West 168th Street  
New York, NY 10032  
July 1, 1984-June 30, 1987

Pediatnc Residency  
Children's Hospital of Philadelphia  
34th & Civic Center Blvd  
Philadelphia, PA 19104  
June 17, 1982-June 30, 1984

Medical School:  
Albert Einstein College of Medicine  
1300 Moms Park Avenue  
Bronx, NY 10461  
Degree: M.D. June 1982



College:

Washington University  
Lindel and Skinker Blvd.  
St. Louis, MO 63105  
Degree: A.B., Chemistry, Summa Cum Laude  
May, 1978

Hospital Appointments:

1985-1987      Assistant Attending Physician. Harlem Hospital Medical Center, New York, NY  
1987-1989      Consultant in Neurology to Neuro-Oncology Clinic, Children's Hospital of Philadelphia, Philadelphia, PA  
1987-1989      Consulting Neurologist The Neurofibroinatosi Clinic, Children's Hospital of Philadelphia, Philadelphia. PA  
1988-1989      Instructor in Pediatrics, Children's Hospital of Philadelphia, University of Pennsylvania, Philadelphia, PA  
1989              Clinical Associate, Department of Neurology, The Cleveland Clinic Foundation, Cleveland, Ohio  
1989-1991      Assistant Staff, Department of Neurology, The Cleveland Clinic Foundation, Cleveland, Ohio  
1991-              Staff, Department of Neurology, The Cleveland Clinic Foundation, Cleveland, Ohio  
1992-              Associate Professor, Division of Neurology, Department of Pediatrics, Ohio State University College of Medicine  
1999-              Head, Section of Pediatric Neurology: Cleveland Clinic Foundation, Cleveland, Ohio

Awards and Grants:

American Society of Clinical Oncology Travel Award, American Society of Clinical Oncology Meeting, San Francisco, May 21-24, 1989.

American Cancer Society, Clinical Oncology Fellow Grant 1988-1989.

Peter Preuss Foundation Grant, 1987-1988.

Eilene L. Schneider Award (Pediatric Department, Albert Einstein College of Medicine), May 1982.

Research Grant, Department of Anesthesia, Albert Einstein College of Medicine, 1979.

John C. Sowden Memorial Award (Chemistry Department, Washington University), April 1978.

St. Louis Chemical Council Award, March 1977.

Boards:

Fellow of the National Board of Medical Examiners, July 1, 1983. No. 270210.

Fellow of the American Board of Pediatrics, June 2, 1989, No. 39726. Recertified on 3/11/96 through 2003

Fellow of the American Board of Psychiatry and Neurology with Special Qualification in Child Neurology, March 1990, No. 720.

**Memberships:**

Child Neurology Society, 1988.

American Academy of Neurology, Fellow 1999, Active Member 1990. Junior Member 1985

Alpha Omega Alpha, Albert Einstein College of Medicine, 1981

Sigma Xi North American Scientific Society), Associate Member, 1978

American Medical Association, 1978

American Epilepsy Society, 1991

**Committee Appointments.**

NCI Investigator Number: 225 13

1989-1992	Brain Tumor Autologous Marrow Transplant Committee (CCG-9883/9004), The Children's Cancer Study Group
1989-1995	Medulloblastoma/PNET Committee (CCG-9892), The Children's Cancer Study Group
1989-1993	Clinical Care Committee, The National Neurofibromatosis Foundation
1990-1992	Bone Marrow Transplantation Committee, The Children's Cancer Study Group
1990-1994	High-Grade Astrocytoma/Autologous Marrow Rescue and Irradiation Committee (CCG-9010, CCG-9922), The Children's Cancer Study Group
1991-	Medical Professional Advisory Committee, Achievement Center for Children, Cuyahoga County
1993-1996	Treatment of Children with low-stage medulloblastoma Standard-dose cranial spinal irradiation vs reduced dose cranio spinal irradiation plus adjuvant chemotherapy with cisplatin, cyclophosphamide and vincristine (CCG-9014), The Children's Cancer Group
1994-1999	Brain Tumor Strategy Committee, Children's Cancer Group
1994-1996	Chairman, Task Force on Malignant Infant Brain Tumors, Children's Cancer Group
1995-1996	Task Force on Neurofibromatosis, Children's Cancer Group
1995-	Practice Committee, Child Neurology Society
1995-	Chairman, CPT Coding Subcommittee of the Practice Committee, Child Neurology Society
1996-	Vice Chairman, Practice Committee, Child Neurology Society
1997-	Chairman, CCG-99703C Infant Brain Tumor Study, Children's Cancer Group

- 1997- Member, Board of Trustees, United Mitochondrial Disease Foundation
- 1998- Member, Board of The Accreditation Council for Pediatric Neurosurgery
- 1999- Steering Member, The Neuroscience Committee, Children's Cancer Group
- 1999- Chairman, Low-Grade Astrocytoma Discipline Committee, Children's Oncology Group
- 1999- Brain Tumor Strategy Committee, Children's Oncology Group
- 2000- Chairman, Compliance and E&M Committee, Child Neurology Section, American Academy of Neurology
- 2000- Professional Advisory Board, The Gathering Place A Wellness Community for Those Touched by Cancer

#### Ad Hoc Reviewer

Annals of Neurology  
 Neurology  
 Medical and Pediatric Oncology  
 Journal of Neuro-Oncology  
 Muscle and Nerve

#### Original Papers:

1. Y. Chen. B. **Cohen**, P.P. Gaspar: Rearrangement of bis(trimethylsilyl) silylene (Me<sub>2</sub>Si)Si in the gas phase; new silylene-silylene interconversions. *Journal of Organometallic Chemistry* 1978;195.
2. B. **Cohen**, M. Handler, D. De Vivo, Garvin JH Jr, Hays AP, Carmel P: Central nervous system melanotic neuroectodermal tumor of infancy (CNS-MNTI): Value of chemotherapy in management. *Neurology* 1988;38:163-164.
3. Roger J. Packer, Larissa T. Bilaniuk, **Bruce H. Cohen**, Bruce H. Braffman, Angela C. Obringer, Robert A. Zimmerman, Kathy R. Siegel, Leslie N. Sutton, Peter J. Savino, Elaine H. Zachai, Anna T. Meadows. Intracranial visual pathway gliomas in children with neurofibromatosis. *Neurofibromatosis* 1988;1:212-222.
4. **Bruce H. Cohen**, Ed Bury, Roger J. Packer, Leslie N. Sutton, L. T. Bilaniuk, Robert A. Zimmerman: Gadolinium-DTPA enhanced magnetic resonance imaging in childhood brain tumors, *Neurology* 1989;39(9):1178-1183.
5. Leslie N. Sutton, Robert E. Lensinski, **Bruce H. Cohen**, Robert A. Zimmerman: Localized <sup>31</sup>P magnetic resonance spectroscopy in large pediatric brain tumors. *J Neurosurg* 1990;72:65-70.
6. Roger J. Packer, Jeffrey C. Allen, Joel L. Goldwein, Joseph Newall, Robert A. Zimmerman, John Priest, Tadanori Tomita, David E. Mandelbaum, **Bruce H. Cohen**, Jonathan L. Finlay, Leslie N. Sutton, Giulio D'Angio: Hyperfractionated radiotherapy for children with brainstem gliomas: A pilot study using 7,200 cGy. *Ann Neurol* 1990;27:167-173.
7. Jonathan L. Finlay, Charles August, Roger Packer, Robert Zimmerman, Leslie Sutton, Arno Fried, Lucy Rorke, Eliel Bayever, Naynesh Kamani, Eric Krammer, **Bruce Cohen**, Beth Sturgill, James Nachman, Sarah Strandjord, Patrick Turski, Sharon Friedrich, Richard Steeves, Manucher Javid High-dose multi-agent chemotherapy followed by bone marrow 'rescue' for malignant astrocytomas of childhood and adolescence *J Neurooncol* 1990;9 239-248

8. Jonathan Finlay, Roger Packer, James Nachnian, Sarah Strandjord, Mitchell Cairo, Russell Geyer, Russell Walker, Mark Malkin, Paul Moots, James Garvin, Bruce Bostrom, Lawrence Ettinger, David Mandlebaum, Ka Wah Chen, Richard Harris, **Bruce Cohen**, Eric Kramer, Naynesh Kamani, Eliel Beyever and Charles August: High-dose chemotherapy with bone marrow rescue in children and young adults with recurrent high-grade brain tumors. In: Autologous Bone Marrow Transplantation. Proceedings of the Fifth International Symposium on Autologous Bone Marrow Transplantation, The University of Nebraska Medical Center, 1991:599-611.
9. Roger J. Packer, Leslie N. Sutton, Joel W. Goidwein, Giorgio Perilongo, Greta Bunin, Janis Ryan, **Bruce H. Cohen**, Giulio D'Angio. Eric D. Kramer, Robert A. Zimmerman, Lucy B. Rorke, Audrey E. Evans, Luis Schut: Improved survival with the use of adjuvant chemotherapy in the treatment of medulloblastoma. *J. Neurosurg* 1991;74:433-440.
10. Michael R. Pranzatelli, Roger L. Albin, **Bruce H. Cohen**: Acute dyskinesias in young asthmatics treated with theophylline. *Pediatr Neurol* 1991;7:216-219.
11. **Bruce H. Cohen**, Allen M. Kaplan, Roger J. Packer: Management of Intracranial Neoplasms in Children with Neurofibromatosis Type 1 and 2. *Pediatr Neurosurg* 1990-91;16:66-72.
12. **Bruce H. Cohen**, Patrick Zweidler, Joel Goidwein, Roger J. Packer: Ototoxicity of cis-platinum in children with brain tumors receiving cranial irradiation. *Pediatr Neurosurg* 1990-91;16:292-296.
13. Sudir Malik, **Bruce H. Cohen**, Arno Fried, John Robinson, Cathy A. Sila: Progressive vision loss: A rare manifestation of familial cavernous angiomas. *Arch Neurol* 1992;49:170-173.
14. John C. Egelhoff, Douglas J. Bates, Jeffrey S. Ross, A. David Rothner, **Bruce H. Cohen**: Spinal MR findings in neurofibromatosis types 1 and 2. *AJNR* 1992;13:1071-1077.
15. **Bruce H. Cohen**, Roger J. Packer, Kathy R. Siegel, Lucy B. Rorke, Giulio D'Angio, Leslie N. Sutton, Derek A. Bruce, Luis Schut. Brain tumors in children under two years: Treatment, survival and long-term prognosis. *Pediatr Neurosurg* 1993;19(4):171-179.
16. **Bruce H. Cohen**. Metabolic and degenerative diseases associated with epilepsy. *Epilepsia* 1993;34:S62-S70.
17. Roger J. Packer, Leslie N Sutton, Roy Elterman, Beverly Lange, Joel Goldwein, Stacy Nicholson, Lynn Mulney, James Boyett, Giulio D'Angio, Kaethe Wechsler-Jentsch, Gregory Reaman, **Bruce H. Cohen**, Derek A. Bruce, Lucy B. Rorke, Patricia Molloy, Janice Ryan, Debra LaFond, Audrey E. Evans, Luis Schut. Outcome of children with medulloblastoma treated with radiation and cisplatin, CCNU, and vincristine chemotherapy. *J Neurosurg* 81:690-698, 1994.
18. Ellis BD, Kosmorsky GS, **Cohen BH**. Medical and surgical management of acute disseminated encephalomyelitis. *J Neuroophthalmol* 14:210-213, 1994.
19. **Bruce H. Cohen**, James M. Boyett, A. Leland Albright, J. Russell Geyer, Jeffrey C. Allen, Jonathan L. Finlay, Patricia McGuire-Cullen, Jerrold M. Milstein, Lucy B. Rorke, Philip Stanley, James A. Stehbens, Susan B. Shurin, Jeffrey Wisoff, Kenneth R. Stevens, Paul M. Zeltzer. Factors and treatment results for supratentorial primitive neuroectodermal tumors in children using radiation and chemotherapy. A Childrens Cancer Group randomized trial. *J Clin Oncol* 13(7):1687-1696, 1995.
20. TR Browne, HH Morris, B Bourgeois, G Erenberg, P Van Ness, E Wyllie, AD Rothner, R Cruse, **BH Cohen**, RE Ramsay, D Katz, R Curless, A Guterman, V Curtis, J Slater, R Grosz, A Avery, BJ Wilder, BM Uthman, RS Fisher, RP Lesser Double blind crossover comparison of Tegretol-XR and Tegretol in patients with epilepsy *Neurol* 45 1703-1707, 1995
21. Prakash Kotagal, **Bruce H. Cohen**, Joseph F. Hahn. Infantile Spasms in a child with brain tumor: seizure-free outcome after resection. *J Epilepsy* 8:57-60, 1995.

22. **Bruce H. Cohen**, Roger J Packer Chemotherapy for Medulloblastomas and Primitive Neuroectodermal Tumors J Neurol Oncol 29 55-68, 1996
23. Saneto RP, Fitch JA, **Cohen BH**. Acute Neurotoxicity of Meperidine in an Infant. Pediatric Neurology 14:339-341, 1996.
24. Jonathan L. Finlay, Stewart Goldman, Meng C. Wong, Mitchell Cairo, James Garvin, Charles August, **Bruce H. Cohen**, Philip Stanley, Robert **A. Zimmerman**, Bruce Bostrom, J. Russell Geyer, Richard E. Harris, Jean Saunders, Alien J. Yates, James M. Boyett, Roger J. Packer and The Chiidrens Cancer Group. Pilot study of high-dose thiotepa and etoposide with autologous bone marrow rescue in children and young adults with recurrent central nervous system tumors. J Clin Oncol 14:2495-2503. 1996.
25. Nancy E. Bass, Elaine Wyllie, Ann Joseph, **Bruce H.Cohen**. Pyridoxine dependent epilepsy: The Need For Repeated Trials and the Risk of Severe Electrocerebral Suppression with Intravenous Therapy. Journal of Child Neurology, 11(5);422-424, 1996.
26. Arie Weinstock, Carolyn Green, Bruce H Cohen, Richard A Prayson Becker Muscular Dystrophy Presenting as Eosinophilic Inflammatory Myopathy in an Infant J Child Neurol 12 146-147,1997.
27. S Goldman, MC Wong, J Garvin, M Cairo, C August, **BH Cohen**, B Bostrom, JR Geyer, RE Harris, AJ Yates, P Stanley, RJ Packer, JM Boyett, J Saunders. JL Finlay and the Chiidrens Cancer Group High-dose thiotepa and etoposide with autologous marrow rescue (ABMR) for children and young adults with recurrent central nervous system (CNS) tumors Peds Neurosurgery
28. DG Frankel, JS Lewin, **BH Cohen**. Massive Osteolysis of the Skull Base. Pediatr Radiol 27:265-267, 1997
29. Gregory E. Plautz, Gene H. Barnett, David W. Miller, **Bruce Cohen**, Richard **A.** Prayson, John C. Krauss, Mark Luciano, Suyu Shu. Systemic T cell adoptive immunotherapy of malignant gliomas. J Neurosurg 88: 42-51, 1998.
30. Dasarahally S. Mohan, John H. Suh, Jennifer L. Phan, Patrick A. Kupelian, **Bruce H. Cohen**, Gene H. Barnett. Outcome in elderly patients undergoing definitive surgery and radiation therapy for supratentorial glioblastoma multiforme at a tertiary care institution. Int J Radiation Oncology Biol Phys 42 (5):981-987, 1998.
31. John H. Suh, Gene H. Barnett, Jason W. Sohn, Patrick A. Kupelian, **Bruce H. Cohen**. Linear accelerattor-based stereotactic radiosurgery for recurrent and newly diagnosed acoustic neuromas. Submitted for publication.
32. Michael **N.** Needle, Patricia T. Malloy, **Bruce H. Cohen**, Claire Mazewski, Peter C. Phillips, Leslie Sutton. A phase I study of estramustine and etoposide in children with refractory cancer. Accepted for publication.
33. Roger J. Packer, Joel Goldwein, Stacy Nicholson, L. Gilbert Vezina, Jeffery C. Allen, M. Douglas Ris, Karin Muraszko, Lucy B. Rorke, William M. Wara, **Bruce H. Cohen**, James M. Boyett. Treatment of children with medulloblastomas with reduced-dose radiation therapy and adjuvant chemotherapy: A Children's Cancer Group Study. Med Pediatr Oncol 33:83-97, 1999.
34. Joel W. Goldwein, Lawrence W.C. Tom, Bruce Cohen, Beverly Lange, Georgio Perilongo, Leslie Sutton, Roger J. Packer, Giulio J. D'Angio. OncoLink: Late Radiation-Associated Deafness in Children Treated for Medulloblastoma and Brainstem Tumors. [http://www.oncolink.upenn.edu/specialty/ped\\_onc/radiation/pedschap/lradeaf.html](http://www.oncolink.upenn.edu/specialty/ped_onc/radiation/pedschap/lradeaf.html), Aug 1999.
35. Packer RJ, Goldwein J, Nicholson HS, Vezina LG, Allen JC, Ris MD, Muraszko K, Rorke LB, Wara WM, **Cohen BH**, Boyett JM. Treatment of children with medulloblastomas with reduced-dose craniospinal radiation therapy and adjuvant chemotherapy: A Children's Cancer Group Study. Journal of Clinical Oncology. 17(7):2127-36, 1999 Jul.

36. Regina I. Jakacki, **Bruce H. Cohen**, Cheryl Jamison, Vince Mathews, Edward Arenson, Darryl C. Longee, Joann Hilden, Al Cornelius, Michael Needle, Doug Heilman, Joel C. Boas, Thomas G Luerksen. Phase II evaluation of interferon-alpha-2A for progressive/recurrent craniopharyngiomas of childhood. *Journal of Neurosurgery*. 92(2):255-60, 2000.
37. John H. Suh, Gene H. Barnett, Jason W. Sohn, Patrick A. Kupelian, **Bruce H. Cohen**. Results of linear accelerator-based stereotactic radiosurgery for recurrent and newly diagnosed acoustic neuromas. *Int J Cancer* 90: 145-151, 2000.
38. Roger J Packer, **Bruce H. Cohen**, Kathleen Coney. Intracranial germ cell tumors. *The Oncologist* 5:312-320, 2000.
39. Feliz Rosenow, Prakash Kotagal, **Bruce H. Cohen**, Carolyn Green, Elaine Wyllie. Multiple sleep latency test and polysomnography in diagnosing Kleine-Levin syndrome and periodic hypsarrhythmia. *J Clin Neurophys* 17 5 19-522, 2000
40. Sarah Rollins, Richard A. Prayson, James T. McMahon, **Bruce H. Cohen**. Diagnostic yield of muscle biopsy in patients with clinical evidence of mitochondrial cytopathy. *Am J. Clin Pathol*, submitted for publication.

#### Abstracts:

1. R. Woods, **B. Cohen**, and P.P. Gaspar: Primary reactions of recoiling germanium atoms. Paper presented at the 10th International Hot Atom Chemistry Symposium, Loughborough University of Technology, September 7, 1979.
2. **B.H. Cohen**, D.C. DeVivo, J. Garvin, Handler MS, Hays AP, Carmel P: Central nervous system melanotic neuroectodermal tumor of infancy (CNS-MNTI): Value of chemotherapy in management. *Neurology* 1987;37(Supp. 1):302.
3. **B.H. Cohen**, R.J. Packer, K.R. Siegel, Sutton LN, Bruce DA, Schut L: Brain tumors (BT) in children under two years: Treatment, survival, and long-term prognosis. *Neurology* 1988;38(Supp. 1):281.
4. **B.H. Cohen**, E. Bury, R.J. Packer, Zimmerman R, Sutton LA, Schut L: Gadolinium-DTPA (GAD)-enhanced MRI imaging in childhood brain tumors. *Neurology* 1988;38(Supp.1):393.
5. **B.H. Cohen**, R.J. Packer, B. Braffman, Bilaniuk LT, Zimmerman RA, Obringer A, Zachai EH, Meadows, AT: Neurologic and magnetic resonance imaging abnormalities in symptomatic and asymptomatic children with neurofibromatosis type 1: Incidence and significance. *Ann Neurol* 1988;24:306.
6. **B.H. Cohen**, G.T. Berry, P. Kaplan, Rorke L, Chuang DT, Old S, DeVivo DC: Congenital central nervous system (CNS) and systemic malformations in inborn errors of metabolism. *Am. J. Hum. Genet.* 1988;43(Supp.):A4.
7. **B.H. Cohen**, L.N. Sutton, R.E. Lensinski, R.A. Zimmerman, and R.J. Packer. <sup>31</sup>P-magnetic resonance spectroscopy (<sup>31</sup>P-MRS) in childhood brain tumors. *Neurology* 1989;39(Suppl 1):263.
8. **Bruce H. Cohen**, Patrick Zweidler, Joel Goldwein, Roger J. Packer: Ototoxicity of cis-platinum in children with brain tumors receiving cranial irradiation. *Proceedings American Society of Clinical Oncology* 1989;8:296.
9. Roger J. Packer, Leslie N. Sutton, Audrey E. Evans, Giulio D'Angio, **Bruce H. Cohen**, Jonathan Finlay, Luis Schut: "Poor-risk" medulloblastoma: Improved 3 year disease-free survival after treatment with chemotherapy. *Ann Neurol* 1989;26(3):459.
10. Debra A. Gusnard, **Bruce H. Cohen**, Robert A. Zimmerman, et al.: MR imaging of the brain in children with neurofibromatosis types I and II: Focal areas of abnormal signal intensity. *Radiology* 1989;173(P): 188.
11. Lenkinski RE, Sutton LN, **Cohen BH**, Packer RJ, Zimmerman RA: Integrated MRI/<sup>31</sup>P MRS studies of large pediatric brain tumors. *Radiology* 1989;173(P):70.



12. Packer RJ, Sutton LN, Evans AE, D'Angio G, **Cohen BH**, Finlay J, Schut L: Efficacy of Radiotherapy and adjuvant chemotherapy in children with 'poor-risk' medulloblastoma. *J Neurooncol* 1989;7:S21.
13. Sudhir Malik, **Bruce H. Cohen**, Arno Fried, John Robinson, Cathy A. Sila: Progressive visual loss: A rare manifestation of familial cavernous angiomas. *Ann Neurol* 1990;28(3):428.
14. RJ Packer, EH Darner, D Herlyn, M Bender, K Adachi, S Heyman, **BH Cohen**: Murine antiepidermal growth factor monoclonal antibody (alphaEGFr MAB 425) for the imaging and treatment of childhood brain tumors, *Ann Neurol* 1990;28(3):418.
15. RJ Packer, LN Sutton, J Goldwein, G Perilongo, G Bunin, J Ryan, **BH Cohen**, G D'Angio, L Schut, AE Evans: Outcome of children with medulloblastoma/primitive neuroectodermal tumors of the posterior fossa in the modern era: Improved survival with adjuvant chemotherapy. *Ann Neurol* 1990;28(3):442.
16. Germeet Singh, **Bruce H. Cohen**, Melinda Estes, Elaine Wyllie, A D Rothner, Gerald Erenberg, Robert P Cruse: Cerebral Gangliogliomas in Childhood: Presentation, Pathologic Variability, Treatment and Outcome. *Ann Neurol* 1991;30(3):457.
17. J Garvin, J Finlay, R Walker, J Nachman, FL Johnson, M Cairo, **B Cohen**, R Harris, R Geyer, S Strandjord, KW Chan: High-dose chemotherapy and autologous bone marrow rescue for high-risk central nervous system (CNS) tumors in children under six years of age. *Proc Am Soc Clin Oncol* 1992;11:150, A421.
18. B Baetz-Greenwalt, A Rothner, C Saracusa, G Erenberg, **B Cohen**, R Cruse: Lack of benefit of intravenous gammaglobulin in treatment of intractable childhood epilepsy (ICE) in children with and without IgG-subclass deficiency. *Ann Neurol* 1992;32:434.
19. B Flasterstein, AD Rothner, A Fried, **B Cohen**, M Estes, P Ruggieri, G Erenberg: Neurofibromatosis 2 in young patients: An "aggressive" disorder. *Ann Neurol* 1992;32:482.
20. Packer RJ, Sutton LN, Elterman RD, Goldwein JW, Nicholson HS, Bruce DA, Lange B, Phillips P, Mulney L, Cohen B, Chadduck W, Boyett J, Reaman C, Schiff S, Schut L. Progression-free survival of children with "poor-risk" medulloblastoma after treatment with radiotherapy and CCNU, vincristine and cis-platinum chemotherapy. *Ann Neurol* 1993;34:270.
21. Flasterstein B, Rothner AD, **Cohen BH**, Estes M, Erenberg G, Fried A. Neurofibromatosis 2 in young patients: Imaging Experience. *J Neuroimaging* 1993;3:72.
22. Friedman HS, Ochs J, Finlay J, Geyer R, Arndt C, **Cohen B**, Phillips P, Strauss LC, Hochberg F, Schold SC, Bigner DD, Colvin OM. Phase I trial of intrathecal 4-hydroperoxycyclophosphamide for neoplastic meningitis. *Proc Annu Meet Am Assoc Cancer Res* 1993;34:A1598.
23. **Cohen BH**, Shurin SB, Zeltzer PM, Albright AL, Boyett JM, Ceyer JR, Allen JC, Finlay JL, McGuire P, Milstein JM, Rorke LB, Stanley P, Stehbens JA, Stevens KR, Wisoff J. Randomized trial of CCNU, vincristine and prednisone versus "8-in-1" chemotherapy in the treatment of supratentorial primitive neuroectodermal tumors (S-PNET): A Childrens Cancer Group study. *Ann Neurol* 1993;34:270-271.
24. Flasterstein B, Rothner AD, **Cohen B**, Estes B, Browne E, Ruggieri P. Segmental neurofibromatosis: *Ann Neurol* 1993;34:283.
25. Packer RJ, Sutton LN, Elterman RD, Goldwein JW, Nicholson HS, Bruce DA, Lange B, Phillips P, Mulney L, **Cohen B**, Chadduck W, Boyett J, Reaman G, Schiff S, Schut L. Treatment of "poor-risk" medulloblastoma with radiation and chemotherapy: 5-year progression-free survival. *Ann Neurol* 1993;34:270.

26. Kotagal P, Bourgeois, B, **Cohen B**, Wyllie E. Infantile spasms in a child with brain tumor: Seizure-free outcome after resection. *Epilepsia* 1993;34:99.
27. Packer RJ, Sutton LN, Elterman RD, Goldwein JW, Nicholson HS, Bruce DA, Lange B, Phillips P, Mulney L, **Cohen B**, Chadduck W, Boyett J, Reaman G, Schiff S, Schut L. Progression-free survival of children with "poor-risk" medulloblastoma after treatment with radiotherapy and CCNU, vincristine and cis-platinum chemotherapy. *Ped Neurosurg* 19:309-310, 1993.
- 27 Gerwitz RJ, Barnett GH, **Cohen BH**, Lupica KM. Response to tamoxifen in patients failing conventional therapy for malignant glioma. *Proceedings of The American Association of Neurological Surgeons 62nd Annual Meeting* 525(A1428), 1994
28. Bass NE, Ruggieri PM, **Cohen BH**, Rothner AD, Zepp R, Patel N. Clinical usefulness of magnetic resonance imaging in pediatric headache. *Ann Neurol* 38:492 (A96), 1995.
29. Arie Weinstock, **Bruce H. Cohen**, Allen Kaplan, Paul Ruggieri, A David Rothner. Brainstem lesions in children with Neurofibromatosis type 1. *Ann Neurol* 38 492 (A105), 1995
30. Packer RJ, Goldwein JW, Boyett J, Nicholson HS, **Cohen BH**, Ris MD, Wara W, Allen J, Rorke L. Early results of reduced-dose radiotherapy plus chemotherapy for children with nondisseminated medulloblastoma: A Children's Cancer study. *Ann Neurol* 38:490 (A67), 1995.
31. Needle MN, Malloy PT, Packer RJ, Friedman HS, **Cohen BH**, Jakacki R, Korf B, Vaughn SN, Phillips PC. A phase II randomized trial of 13-cis retinoic acid (CRA) and interferon alpha-2a (INF) in the treatment of plexiform neurofibroma (PN) in patients with neurofibromatosis type I (NF1). *Pediatric Research* 37 (4 Part 2). 1994.
32. Suh JH, Barnett GH, Sohn JW, **Cohen BH**, Flowers A, Peereboom DM, Macklis RM. Linac-based stereotactic radiosurgery for newly diagnosed malignant gliomas. *Neurology* 46:A182, 1996.
33. Suh JH, Barnett GH, Sohn JW, **Cohen BH**, Flowers A, Peereboom DM, Macklis RM. Results of Linac-based stereotactic radiosurgery for newly diagnosed glioblastoma multiforme. *Proceedings of the LINAC radiosurgery Scientific Program*. (A030), 62-3, 1995.
34. Weinstock A, Rothner AD, Chez M, Moorjani B, **Cohen BH**. Life-threatening and fatal complications of vascular neurofibromatosis. *Ann Neurol* 40(2), A148, p 324, 1996.
35. Davis K, MacCollin M, Jacoby LB, Baronel R, Kronn D, Ahrens M, Weinstock A, **Cohen B**, Gusella JF. The Molecular Basis of Schwannomatosis. *Am J Human Genetics* 59(Supp):A255, 1996.
36. Peereboom DM, Barnett G, Bukowski R, **CohenBH**, Flowers A, Snyder J, Macklis R, Suh J. Phase II trial of 9-amino(20S)Camptothecin in patients with glioblastoma multiforme. Submitted to The Neurofibromatosis Consortium Meeting.
37. Rosenow F, Kotagal P, **Cohen B**, Wyllie E. PSG and MSLT in Kleine-Levin Syndrome and Periodic Hypersomnia. Submitted to *Epilepsia*.
38. Suh J, Hamisch MJ, Barnett GH, **Cohen BH**, Macklis RM. Initial Experience with intensity modulated radiation therapy. LINAC Radiosurgery 1997 Meeting.
39. Vorster SJ, Suh JH, Barnett GH, Sohn JW, Kupelian P, Peereboom DM, **Cohen BH**. Stereotactic radiosurgery for malignant gliomas. LINAC Radiosurgery 1997 Meeting.
40. Suh JH, Barnett GH, Miller DW, Kupelian PA, **Cohen BH**. Is whole brain radiation therapy needed for all patients with newly diagnosed brain metastases undergoing stereotactic radiosurgery? *Int J Radiat Oncol Biol Phys* 39 (2):226 [A1022], 1997.

41. **Cohen BH**, Arie Weinstock, Prakash Kotagal, and Elaine Wyllie. Disorders of Oxidative Metabolism in Children Undergoing Video-EEG monitoring. *Epilepsia* 38(Supp 8):A6.005 (page 220), 1997.
42. Ravi Dukupati, **Bruce H. Cohen**, Douglas S. ~~Kerr~~, Charles L. Hoppel. Defect in Mitochondrial Function Manifesting as Psychotic Encephalopathy. *Molecular Genetics and Metabolism* 63(1):61, 1998.
43. **Bruce H. Cohen**, Charles L. Hoppel, Douglas S. Kerr, Richard A. Prayson, Caroline M. Abramovich, Steve Davis Fatal Status Epilepticus In A 9-Year Old Girl Due to A Defect Mitochondrial Electron Transport Chain Complex II. *Molecular Genetics and Metabolism* 63(1):63, 1998.
42. Plautz GE, Barnett GH, Miller DW, **Cohen BH**, Prayson RA, Krauss JC, Luciano M, Shu S. Systemic adoptive immunotherapy of malignant gliomas using activated vaccine-draining lymph node T cells. *Neurosurgical Focus* Vol 3 article 5 1997.
- 43 Moots PL, Jenniigs MT, Bowen **MG**, Choy H. Porter LL, Strupp JA, Rosenblatt PA, Dobbs TW, **Cohen BH**, Gilbert MA Multiagent chemotherapy followed by craniospinal radiation for adults with poor risk medulloblastoma and ependymoma with subarachnoid dissemination *Neurology* 50(4), P06 015, 1998
- 44 Mohan DS, Suh JH, Phan J, Kupelian PA. **Cohen BH**, Barnett GH Results of definitive surgery and radiation therapy for patients aged  $\geq 70$  years with supratentorial glioblastoma multiforme The Cleveland Clinic Experience. *Neurology* 50(4), S52 002, 1998
45. **Cohen BH**, Peereboom D, Flowers A, Barnett GH, Suh J, Elson P, Lupica K. 120-hour continuous infusion thiotepa for treatment of recurrent brain tumors: A phase I-II institutional study. *Neurology* 50(4), P06.020, 1998.
45. Suh JH, Mohan, DS, Phan JL, Kupelian PA, **Cohen BH**, Barnett GH. Results of definitive surgery and radiation therapy for patients aged  $\geq 70$  years with supratentorial glioblastoma multiforme. Submitted, 1998 ASTRO Meeting.
46. Crownover RL, Glosser GD, Weinhaus MS, Macklis RM, Deibel FC, Murdock L, Suh J, Chen Q-S, Barnett GH, Miller DW, Peereboom D, Stevens GHJ, **Cohen BH**. Early clinical experience with the Cyberknife for intracranial lesions. Submitted to ASTRO. 1998.
47. Lim L-L, Shoffner JM, Hoppel C, **Cohen BH**. The spectrum of mitochondrial complex I deficiencies: A biochemical and clinical study. *Neurology* 52, P03.099, 1999.
- 48 Packer RJ, Ris MD, Goldwein J, Nicholson HS, Allen J, Murasko K, rorke L, Wara W, Vezina G, **Cohen B**, Boyett J Neurocognitive Status in children with medulloblastoma following reduced-dose craniospinal radiotherapy and chemotherapy *Ann Neurol* 46(3), 526 (A21), 1999.
49. Gold DR, Cohen BH, Hoppel CL. Characterization of Biochemical and Clinical Features of Children with Electron Transport Chain Complex III Deficiency. *Ann Neurol* 46(3), 535 (A54), 1999.
50. **B.H. Cohen**, D.R. Gold, L. Lim, S.A. Joseph, F. Yanak and C.L. Hoppel . Polarographic and Spectrophotometric Analysis of 73 Patients with Mitochondrial Cytopathies: A Clinical, Biochemical, and Pathologic Study. *Euromit 4 Proceedings*.
51. R.P. Saneto, **B.H. Cohen**, A.D. Rothner, C.L. Hoppel. Well Known Neurological Conditions That Have An Associated Electron Transport Chain Deficiency. *Euromit 4 Proceedings*.
52. Barnett GH, Suh JH, Sohn JW, Kupelian PA, **Cohen BH**. Linear accelerator radiosurgery for vestibular schwannoma. *LINAC Radiosurgery* 1999.

53. S. Hariharan, W. Shapiro, S. Chang, **B. Cohen**, L. Mechtler, L. Carr. Phase II Randomized Dose Ranging Trial of Human Corticotropin Releasing Factor in Symptomatic Brain Tumor patients. *Neurology*, 2000
54. Gupta **A**, **Cohen BH**, Ruggieri P, Packer RJ, Phillips P. A Phase I Study of Thalidomide for the Treatment of Plexiform Neurofibroma in Patients with Neurofibromatosis. *Neurology*, 2000
55. Goyal L K, Suh J H, Reddy C, Barnett G, Peereboom D, Cohen B, Stevens G, Gupta M, Reddy S, Crownover R, Elson P, G Hercbergs A. A Right test wrong reason Phase I/II High-Dose Tamoxifen Dose Escalation Study in Combination with reduction of Thyroid Hormone Levels in Failed Malignant Glioma Patients
56. Goyal LK, Barnett GH, Suh JH, Reddy C, Peereboom D, **Cohen BH**, Stevens G, Vogelbaum M, Gupta MK, Reddy S, Crownover RL, Elson PJ, Fine R, Hercsberg AA. Phase I Trial of Tamoxifen and Induced Subclinical Hypothyroidism for Recurrent Malignant Glioma – Preliminary Results. Submitted: Congress of Neurological Surgeons
57. Barnett GH, Prayson R, **Cohen B**, Peereboom D, Tchumova O, Cowell J, Stevens G, Vogelbaum M. Patterns of presentation of oligodendroglioma in the 1990s – review of 146 cases at The Cleveland Clinic. Submitted: Congress of Neurological Surgeons
58. Hercbergs AA, Goyal LK, Suh JH, Reddy C, Barnett G, Cohen B, Stevens G, Reddy S, Peereboom D, Crownover R, Elson PG. Phase I/II high-dose tamoxifen dose escalation study in combination with reduction of thyroid hormone levels in failed malignant glioma patients
59. Barnett GH, Goyal LK, Reddy CA, Cohen BH, Peereboom DM, Prayson RA, Stevens GH, Vogelbaum MA, Suh JH. Treatment of Newly Diagnosed Glioblastoma Multiforme: Trends in Treatment, Survival, and Recurrence from the Cleveland Clinic Foundation. *Astro*, 2000.
60. Goyal L K, Hercbergs A.A, Suh JH, Reddy CA, Peereboom D, Cohen B, Stevens GH, Gupta MK, Reddy S, Elson PJ, Barnett GH. Thyroid Suppression and High-Dose Tamoxifen in Recurrent Malignant Glioma Patients: Results of Pilot Trial. *Astro*. 2000
61. Saneto RP, Cohen BH, Ruggieri P, Hoppel CL. MRS Detection of CNS lactate Peaks in Primary mitochondrial Cytopathies. Proceedings of the UMDF Mitochondrial Cytopathies Conference, June 1-3, 2000.
62. Vames M, Cohen B, Kerr D, Friedman N, Slabe T, Hoppel C. Oxidative Phosphorylation as a tool for Diagnosis of Defects in Complexes I, III and IV of the Mitochondrial Respiratory Chain. Proceedings of the UMDF Mitochondrial Cytopathies Conference, June 1-3, 2000.

#### Chapters and Reviews:

1. **Bruce Cohen:** Learning Disabilities in NF1 From the Perspective of a Child Neurologist. In, Conference Series Volume 1, The National Neurofibromatosis Foundation Inc. New York, 71-78, 1989.
2. **Bruce H. Cohen** and A. David Rothner: Incidence, types, and management of cancers in patients with neurofibromatosis. *Oncology* 1989;3(9):23-30.
3. **Bruce H. Cohen:** Neurologic Causes of Learning Disabilities. In, Seminars in Neurology. G. Erenberg (ed). 1991;1(1):4-13.
4. E. D. Kramer, **B. H. Cohen**, R. J. Packer: Central nervous system morbidity secondary to chemotherapy. In, Complications of Cancer Management. Plowman P.N., McElwain T.J., and Meadows A.T., (eds.), Butterworth-Heinemann Ltd, Oxford., U.K., pp. 329-347; 1991.

5. Bruce H. Cohen, Roger J. Packer: Adverse neurologic effects of chemotherapy and radiation therapy. In, Neurological Aspects of Pediatrics. B.O. Berg (ed), Butterworth, Stoneham, MA; 567-594, 1992.
6. Bruce H. Cohen, Roger J. Packer: Tumors of the central nervous system. In, Practical Pediatric Oncology. G.J. D'Angio, D. Sinniah, A.T. Meadows, A.E. Evans, J. Pritchard (eds), London, Edward Arnold, 1992.
7. Roger J. Packer, Bruce H. Cohen: Neurologic Emergencies. In, Practical Pediatric Oncology. G.J. D'Angio, D. Sinniah, A.T. Meadows, A.E. Evans, J. Pritchard (eds), London, Edward Arnold, 1992.
8. Earl Zimmerman and Bruce H. Cohen: Congenital Tumors. In, Merritt's Textbook of Neurology. 9th Edition. Lewis P. Rowland, (ed), Williams & Wilkins, Baltimore, 1995.
9. Bruce H. Cohen: Headache as a symptom of neurologic disease. In, Seminars in Neurology. A.D. Rothner (ed). 2:144-150, 1995.
10. Bruce H. Cohen and James Garvin. Brain Tumors In Roudoloh's Pediatrics. 20th Edition Rudolph, Hoffman, Rudolph (eds), Appleton & Lange, Stamford, 1900-1920, 1996
11. Bruce H. Cohen, Roger J. Packer: Neurologic Aspects of Childhood Brain Tumors. In, Child Neurology. Augustine Legido (ed). Awaiting publication.
12. Bruce H. Cohen: Headaches. In: Practical Strategies In Pediatric Diagnosis and Therapy Kliegman (ed), W.B. Saunders Company, Philadelphia. 574-589, 1996.
13. Bruce H. Cohen and Roger J. Packer: Tumors of the Fourth Ventricle. In, Cohen Alan (ed), Surgical Disorders of the Fourth Ventricle, Blackwell Science, Cambridge, Mass, 1996.
14. Roger J. Packer and Bruce H. Cohen: Germ Cell Tumors and Pinealoma. In: Handbook of Clinical Neurology. Vinken & Bruyn (eds), Elsevier Science. 1998.
15. Arie Weinstock and Bruce H. Cohen: In, Luders (ed), Epileptic Seizures: Pathophysiology and Clinical Semiology, W.B. Saunders Co.
16. Bruce H. Cohen and John C. Andrefsky: Increased Intracranial Pressure. In: Maria BL (ed), Current Management in Child Neurology. B.C. Decker Inc., Hamilton, Ontario, 325-330, 1999.
17. Bruce H. Cohen, Elizabeth C. Dooling, A. David Rothner. Abnormal Signs and Symptoms (Ataxia, Bell's Palsy, Nystagmus, Papilledema, and Ptosis) In: Derschewitz RA (ed), Ambulatory Pediatric Care 3<sup>rd</sup> Edition. Lippincott-Raven, Philadelphia, 822-829, 1999.
18. Bruce H. Cohen: Approaches to Brain Tumors in Children. The Neurologist 5(2):75-89; 1999.
19. Deborah R. Gold, Roger J. Packer, Bruce H. Cohen. Chemotherapy for Primitive Neuroectodermal Tumors. Neurosurg Focus 7 (2):Article 1, 1999 ([http://www.aans.org/journals/online\\_j/august99/7-2-1.html](http://www.aans.org/journals/online_j/august99/7-2-1.html))

#### Books and Monographs:

1. Bruce H. Cohen, Bruce R. Korf, Jane N. Pugh, eds. Neurofibromatosis 2. Jane Novak Pugh Conference Series, Volume 4. The National Neurofibromatosis Foundation, New York, 1992

#### Other Publications:

1. Pamelyn Close, David Friedman, Antonia Uri: Viral-Associated Hemophagocytic Syndrome. Proceedings of the Tumor Board of the Children's Hospital of Philadelphia. Quoted statements of the proceedings. Medical and Pediatric Oncology 1990;18:119-122.
2. Bruce H. Cohen Clinic Notes The Plain Dealer, April 9, 1991
3. Bruce H. Cohen: Book Review. Neurofibromatosis: Phenotype, Natural History, and Pathogenesis, 2nd ed., by V.M. Riccardi. Neurology 1992;42:2308.
4. Bruce H. Cohen: Medical Questions. Akron Beacon Journal, December 15, 1992.
5. Bruce H. Cohen: Medical Questions. Akron Beacon Journal, August 15, 1995.
6. Bruce H. Cohen: Nonepileptic Movement Disorders. Audio-Digest Pediatrics Volume 42, Number 07. April 9, 1996.
7. Bruce H. Cohen: Mitochondrial Cytopathies: Evaluation and Management. United Mitochondrial Disease Foundation Newsletter. Volume 2, Issue 3, 1997.
8. Bruce H. Cohen, John Shoffner, Glenn DeBoer: Anesthesia and Mitochondrial Cytopathies. United Mitochondrial Disease Foundation Newsletter. Volume 3, Issue 1, 1998.
9. Bruce H. Cohen: Strokes in MELAS and Mitochondrial Cytopathies. United Mitochondrial Disease Foundation Newsletter. Volume 3, issue 3, 1998.
10. Featured in a front-page article on Rett Syndrome. The Chronicle Telegram (Elyria, Ohio). October 3, 1999.
11. Bruce H. Cohen: Book Review. Neuro-oncology: The essentials, edited by Mark Bemstein and Mitchel S. Berger.

#### Presentations:

1. Central nervous system melanotic neuroectodermal tumor of infancy (CNS-MNTI) Value of chemotherapy in management American Academy of Neurology, Section on Neuro-Oncology, New York, NY, April 9, 1987
2. Brain tumors (BT) in children under two years: Treatment, survival, and long-term prognosis. American Academy of Neurology, Section on Child Neurology, Cincinnati, OH, April 1988.
3. Gadolinium-DTPA (GAD)-enhanced MRI imaging in childhood brain tumors. American Academy of Neurology, Section on Neuro- Oncology, Cincinnati, OH, April 1988.
4. Neurologic and magnetic resonance imaging abnormalities in symptomatic and asymptomatic children with neurofibromatosis type 1: Incidence and significance. Child Neurology Society, Neuro- Oncology Section, Halifax, Nova Scotia, September 1988.
5. "Phosphorous magnetic resonance spectroscopy (<sup>31</sup>P-MRS) in childhood brain tumors. American Academy of Neurology, Session on Neuro-Oncology, Chicago, IL, April 13-19, 1989.6. Ototoxicity of cis-platin in children with brain tumors receiving cranial irradiation. American Society of Clinical Oncology, San Francisco, CA, May 21-23, 1989.
7. "Poor-risk" medulloblastoma: Improved three-year disease- free survival after treatment with chemotherapy. Child Neurology Society 1989 Meeting, San Antonio, TX, October 11-13, 1989.
8. MR imaging of the brain in children with neurofibromatosis types I and II: Focal areas of abnormal signal intensity. The Radiological Society of North America, Chicago, IL, November 28, 1989, Section of Neuroradiology.

- 9 Integrated MRI/<sup>31</sup>P MRS studies of large pediatric brain tumors The Radiological Society of North America, Chicago, IL, November 28, 1989
10. High-dose chemotherapy with bone marrow rescue in children and young adults with recurrent high-grade brain tumors. Proceedings of the Fifth International Symposium on Autologous Bone Marrow Transplantation, Omaha, August 1990.
11. Progressive visual loss: A rare manifestation of familial cavernous angiomas. Child Neurology Society 1990 Meeting, Atlanta, GA, October 18-20, 1990.
12. Murine antiepidermal growth factor monoclonal antibody (alphaEGFr MAR 425) for the imaging and treatment of childhood brain tumors. Child Neurology Society 1990 Meeting, Atlanta, GA, October 18-20, 1990.
- 13 Outcome of children with medulloblastoma/primitive neuroectodermal tumors of the posterior fossa in the modern era Improved survival with adjuvant chemotherapy Child Neurology Society 1990 Meeting, Atlanta, GA, October 18-20, 1990
- 14 Clinical Overview Neurofibromatosis Type 2 Neurofibromatosis Symposium, Boston, April 28, 1991
- 15 Cerebral Gangliogliomas in Childhood Presentation, Pathologic Variability, Treatment and Outcome Child Neurology Society 1991 Meeting, Portland OR, October 1991
- 16 Lack of benefit of intravenous gammaglobulin in treatment of intractable childhood epilepsy (ICE) in children with and without IgG-subclass deficiency Child Neurology Society 1992 Meeting, New Orleans LA, October 1992
18. Neurofibromatosis 2 in young patients: An "aggressive" disorder. Child Neurology Society 1992 Meeting, New Orleans LA, October 1992.
- 19 Epilepsy and Metabolic Disease American Epilepsy Society 1992 Meeting, Seattle, WA, December 6, 1992
- 20 Neurofibromatosis 2 in young patients Imaging Experience American Society of Neuroimaging, 16th Annual Meeting Orlando, Florida, February 3, 1993
- 21 Phase I trial of intrathecal 4-hydroperoxycyclophosphamide for neoplastic meningitis. AACR, April 9, 1993.
22. Paroxysmal Non-Epileptiform Disorders. American Academy of Neurology Annual Course. New York, NY, May 1, 1993.
23. Randomized trial of CCNU, vincristine and prednisone versus "8-in-1" chemotherapy in the treatment of supratentorial primitive neuroectodermal tumors (S-PNET): A Childrens Cancer Group Study. Child Neurology Society Meeting. Orlando, Florida. October 14-16, 1993.
24. Segmental neurofibromatosis. Child Neurology Society Meeting. Orlando, Florida. October 14-16, 1993
26. Treatment of "poor-risk" medulloblastoma with radiation and chemotherapy: 5-year progression-free survival. Ann Neurol 1993;34:270. Child Neurology Society Meeting. Orlando, Florida. October 14-16, 1993.
27. Kotagal P, Bourgeois B, Cohen B, Wyllie E. Infantile spasms in a child with brain tumor: Seizure-free outcome after resection. Epilepsia 1993;34:99.
28. Progression-free survival of children with "poor-risk" medulloblastoma after treatment with radiotherapy and CCNU, vincristine and cis-platinum chemotherapy. 6th International Symposium on Pediatric Neuro-Oncology.
28. Response to tamoxifen in patients failing conventional therapy for malignant glioma. American Association of Neurological Surgeons 62nd Annual Meeting. San Diego, CA, April 9-14, 1994.

29. Paroxysmal Non-Epileptiform Disorders. American Academy of Neurology Annual Course. New York, NY, May 2, 1994
30. The Role of Adjuvant Chemotherapy in the Treatment of Brain Tumors. International College of Surgeons. Cleveland, Ohio, June 11, 1994.
31. High-Dose Thiotepa and Etoposide with Autologous Marrow Rescue (ABMR) for Children and Young Adults with Recurrent Central Nervous System (CNS) Tumors. International Symposium of Pediatric Neuro-Oncology, Houston, TX, August 3, 1994.
32. Paroxysmal Non-Epileptiform Disorders. American Academy of Neurology Annual Course. Seattle, WA, May 8, 1995
33. Neurologic Causes of Headaches. American Academy of Neurology Annual Course. Seattle, WA, May 8, 1995.
34. Clinical Usefulness of Magnetic Resonance Imaging in Pediatric Headache. Cleveland Clinic Foundation 20th Annual Neuroscience Residents' Day. Cleveland, Ohio, May 25, 1995.
35. External Ophthalmoplegia and Spindle Coma in Combined Carbamazepine and Primidone Overdose. Case Report and Review of the Literature. Cleveland Clinic Foundation 20th Annual Neuroscience Residents' Day. Cleveland, Ohio, May 25, 1995
36. Benign Brainstem Lesions in Children with neurofibromatosis -1. Cleveland Clinic Foundation 20th Annual Neuroscience Residents' Day. Cleveland, Ohio, May 25, 1995
37. Benign Brainstem Lesions in Children with Neurofibromatosis type 1. The NNFF International Consortium for Molecular Biology of NF1 and NF2. Philadelphia, PA, July 14-16, 1995.
38. Spinal Neurofibromatosis: NF1, NF2, or neither? The NNFF International Consortium for Molecular Biology of NF1 and NF2. Philadelphia, PA, July 14-16, 1995.
39. Clinical Usefulness of Magnetic Resonance Imaging in Pediatric Headache. Child Neurology Society Annual Meeting, Baltimore, MD, October 27, 1995.
40. Brainstem lesions in children with Neurofibromatosis type 1. Child Neurology Society Annual Meeting, Baltimore, MD, October 27, 1995
41. Early results of reduced-dose radiotherapy plus chemotherapy for children with nondisseminated medulloblastoma: A Children's Cancer study. Child Neurology Society Annual Meeting, Baltimore, MD, October 27, 1995.
42. Results of Linac-based stereotactic radiosurgery for newly diagnosed glioblastoma multiforme. LINAC Radiosurgery Meeting sponsored by The Florida Neurosurgical society. Lake Buena Vista, FL, December 6-10, 1995.
43. Linac-based stereotactic radiosurgery for newly diagnosed malignant gliomas. Academy of Neurology Annual Meeting, San Francisco, CA, March 26, 1996.
44. Seizures In Patients with Cancer and Brain Tumors. Symposium on Epileptic Seizures: Pathophysiology and Semiology. Seventh International Cleveland Clinic-Bethel Epilepsy Symposium. Cleveland, Ohio May 12, 1996.
45. PSG and MSLT in Kleine-Levin Syndrome and Periodic Hypersomnia. American Professional Sleep Society. San Francisco, CA. June 13, 1997.
46. Is Whole Brain Radiation Therapy Needed for all Patients with Newly Diagnosed Brain Metastases Undergoing Stereotactic Radiosurgery? Submitted to ASTRO.



47. Adhalin deficiency in a patient with limb-girdle muscular dystrophy. Y Zhang, B Cohen, K Levin. 22nd Annual Neuroscience Residents' Day, Cleveland, OH, May 22, 1997.
48. Radiographic and clinical characteristics of children treated at the Cleveland Clinic for acute disseminated encephalomyelitis. S Friedman, B Cohen. 22nd Annual Neuroscience Residents' Day, Cleveland, OH, May 22, 1997.
49. Defects in oxidative phosphorylation manifesting as psychotic encephalopathy in an adult. R Dukupati BH Cohen. 22nd Annual Neuroscience Residents' Day, Cleveland, OH, May 22, 1997.
50. Incidence of concussion in high school football players W Langburt, N Akhtar, K O'Neill, B Cohen. 22nd Annual Neuroscience Residents' Day, Cleveland, OH, May 22, 1997.
51. Mucopolysaccharidosis in an 18 year old man presenting with stroke. K O'Neill, B Cohen. 22nd Annual Neuroscience Residents' Day, Cleveland, OH, May 22, 1997.
52. Is Whole Brain Radiation Therapy Needed For All Patients with Newly Diagnosed Brain Metastases Undergoing Stereotactic Radiosurgery? American Society for Therapeutic Radiation Oncology. Orlando, FL. October 21, 1997.
53. ICD-9 and CPT Coding for the Child Neurologist. Breakfast Seminar. Child Neurology Society Annual Meeting. Phoenix, AZ, October 30, 1997.
54. Thalidomide for the Treatment of Plexiform Neurofibromas in Neurofibromatosis Type 1. Breakfast Seminar. Child Neurology Society Annual Meeting. Phoenix, AZ, October 31, 1997.
55. Disorders of Oxidative Metabolism in Children Undergoing Video-EEG monitoring. 1997 American Epilepsy Society Annual Meeting, Boston, MA. December 10, 1997.
56. Defect in Mitochondrial Function Manifesting as Psychotic Encephalopathy. 1st Mitochondrial Medicine Conference San Diego, CA, February 21, 1998.
57. Fatal Status Epilepticus In A 9-Year Old Girl Due to A Defect Mitochondrial Electron Transport Chain Complex II. 1st Mitochondrial Medicine Conference. San Diego, CA, February 21, 1998.
58. Disorders of Oxidative Metabolism Presenting as Paroxysmal Non-Epileptic Disorders. 1st Mitochondrial Medicine Conference. San Diego, CA, February 21, 1998.
59. Systemic T cell adoptive immunotherapy of malignant gliomas. AACR, New Orleans, LA. March 1998.
60. Reversible Cardiomyopathy/Myopathy Due to a Disorder of Long Chain Fatty Acid Metabolism. 23rd Annual Neuroscience Residents' Day, Cleveland, OH, May 14, 1998.
61. The Spectrum of Mitochondrial Complex I Deficiencies. A Biochemical and Clinical Study. American Academy of Neurology Annual Meeting, Toronto, CA, April 21, 1999
62. Polarographic and Spectrophotometric Analysis of 80 Patients with Mitochondrial Cytopathies: A Clinical, Biochemical, and Pathologic Study. Euromit 4. Cambridge, Great Britain, September 16, 1999.
63. Well Known Neurological Conditions That Have An Associated Electron Transport Chain Deficiency. Euromit 4. Cambridge, Great Britain, September 17, 1999.
64. Neurocognitive Status in children with medulloblastoma following reduced-dose craniospinal radiotherapy and chemotherapy Child Neurology Society Annual Meeting, Nashville, TN, October 14, 1999

65. Characterization of Biochemical and Clinical Features of Children with Electron Transport Chain Complex III Deficiency. Child Neurology Society Annual Meeting. Nashville, TN, October 16, 1999.
66. Making Sense of Respiratory Chain Analysis. Mitochondrial Symposium. National Institutes of Health. Bethesda, MD, March 14, 2000.
67. Clinical Aspects of Mitochondrial Cytopathies in Children and Adults. Mitochondrial Cytopathies 2000 – Professional Conference. Cleveland, OH, June 1, 2000.
68. Clinical Aspects of Mitochondrial Cytopathies in Children and Adults. Mitochondrial Cytopathies 2000 – Family Conference. Cleveland, OH, June 2, 2000.
69. Case Presentations in Mitochondrial Medicine. Mitochondrial Cytopathies 2000 – Professional Conference. Cleveland, OH, June 3, 2000.
70. Overview Of Scientific Presentations Mitochondrial Cytopathies 2000 – Family Conference. Cleveland OH, June 3, 2000.
- 71.

Media Appearances:

1. Live at Five, Channel 3 News, Discussion about the report concerning the increase incidence of childhood brain tumors. June 18, 1991.
2. Live at Five, Channel 3 News, Discussion about Neurofibromatosis. February 23, 1993.
3. CBS Evening News, Discussion about Brain Tumors. March 13, 1995.
4. WJW TV-8 Evening News, Adrenoleukodystrophy. June 2, 1995.
5. WERE 1300AM Health Care 95, One-hour discussion about brain tumors and neurofibromatosis. November 15, 1995.
6. WERE 1300AM Health Care 96, One-hour discussion about pediatric neurology. April 3, 1996.
7. New York Times, Antineoplastic Therapy. July 25, 1996.
8. WERE 1300AM Health Care 96, One-hour discussion about pediatric neurology. September 18, 1996.
9. Channel 5 Evening News, Mitochondrial Cytopathies, July 20, 1998.

Invited Lectures:

1. The Child with a Brain Tumor, Symposium for Educators of Elementary and High School Students with Cancer, Philadelphia, PA, December 1987.
2. Neurologic Aspects of Neurofibromatosis. Neurology Grand Rounds, Hospital of the University of Pennsylvania, February 4, 1988.
- 3 Long-term Neurologic Effects of Cancer Therapy. Symposium for Teachers and Parents, Learn Conference, Philadelphia, PA, April 29, 1988.
- 4 Pediatric Brain Tumors Pediatric Grand Rounds. The Cleveland Clinic Foundation, May 24, 1988
5. Neurologic Effects of Therapeutic Irradiation: Neurology Grand Rounds, The Cleveland Clinic Foundation, May 25, 1988.
- 6 Long-term Neurologic Effects of Cranial and Spinal Irradiation Symposium for Teachers and Parents, Learn Conference, Philadelphia, PA, November 11, 1988
- 7 Learning Disabilities in Neurofibromatosis Type 1 10th Annual Meeting, The National Neurofibromatosis Foundation, Inc , Philadelphia, PA, November 12, 1988
8. The Child with a Brain Tumor. Symposium for Educators of Elementary and High School Students with Cancer, Philadelphia, PA, December 2, 1988.
9. Learning Disabilities in Neurofibromatosis: Meeting of the Ohio Chapter of the National Neurofibromatosis Foundation, Inc., Cleveland, OH, April 9, 1989.
- 10 Research Progress in Neurofibromatosis: 1989 Northeastern Regional Seminar, Sponsored by Singles Helping Others Princeton, NJ, April 29, 1989
11. Neurofibromatosis: Pediatric Grand Rounds, The Cleveland Clinic Foundation, September 12, 1989
12. Neurofibromatosis Update: Neuro-ophthalmology Grand Rounds, The Cleveland Clinic Foundation, September 22, 1989.
13. Cancer in Neurofibromatosis: The Cleveland Clinic Cancer Grand Rounds, The Cleveland Clinic Foundation, October 3, 1989.
14. Management of Nervous System Neoplasms in Children with Neurofibromatosis. The Children's Cancer Study Group, Neurology Committee and Brain Tumor Strategy Committee, Denver, November 4, 1989.
15. The Role of Actinomycin-D in Future Pediatric Brain Tumor Trials. The Children's Cancer Study Group, New agents Committee, Denver, November 4, 1989.
16. The Neurologic Aspects of Neurofibromatosis Type 1. Neurology Grand Rounds, The Cleveland Clinic Foundation, February 19, 1990.
17. Clinical Aspects of Neurofibromatosis Type 1 and 2. ENT Grand Rounds, The Cleveland Clinic Foundation, March 3, 1990.
- 18 The Medical Approach to the Patient with Neurofibromatosis Medical Grand Rounds, The Cleveland Clinic Foundation, March 29, 1990

19. New Chemotherapeutic Approaches in the Treatment of Children with Brain Tumors. Pediatric Grand Rounds, Mount Sinai Hospital, Cleveland, Ohio, March 30, 1990.
20. The Dying Child: End of Life Decisions. Pediatric Grand Rounds, The Cleveland Clinic Foundation, May 1, 1990
21. Association of Cancer in Neurofibromatosis Types 1 and 2. The Ohio Chapter of The National Neurofibromatosis Association. Cleveland, OH, June 3, 1990
22. Pediatric Brain Tumor Clinic Report. The Cleveland Clinic Cancer Center Grand Rounds. June 12, 1990
23. Childhood Brain Tumors. EEG Technologist Rounds. The Cleveland Clinic Foundation. October 5, 1990.
24. The Neurologic Assessment of Children and Adolescence with Psychiatric Symptoms. Pediatric Neurology Update. The Cleveland Clinic Foundation. October 31, 1990.
25. Unusual Brain Tumors. Pediatric Neurology Update. The Cleveland Clinic Foundation. October 31, 1990.
26. Management of Minor Head Trauma in Children. Pediatric Neurology Update. The Cleveland Clinic Foundation. October 31, 1990.
27. Medical Aspects of Mental Retardation in Children. Professional Association for Retardation. 1990 Convention. Columbus, Ohio. November 5, 1990.
28. Medical Aspects of Epilepsy in Children. Professional Association for Retardation. 1990 Convention. Columbus, Ohio. November 5, 1990.
29. Headaches in Children. St. John's Westshore Pediatric Workshop. Mamott Hotel, Cleveland, Ohio. November 14, 1990.
30. The Neurological Assessment of Children Presenting with Psychiatric Symptoms. Neuroscience Grand Rounds, The Cleveland Clinic Foundation, November 26, 1990.
31. Pediatric Brain Tumor Case Reports: Brainstem Ganglioglioma and Cauda Equina Primitive Neuroectodermal Tumor. Cancer Center Grand Rounds, The Cleveland Clinic Foundation, November 27, 1990.
32. Craniopharyngioma in Children: Controversies in Diagnosis and Treatment. Mount Sinai Hospital, Department of Pediatrics, Grand Rounds. December 7, 1990.
33. Neurologic Aspects of Neurofibromatosis Type 1. Neurofibromatosis Symposium, Ft. Lauderdale, FL, March 9, 1991.
34. Neurologic Aspects of Neurofibromatosis Type 2. Neurofibromatosis Symposium, Ft. Lauderdale, FL, March 9, 1991.
35. Neurologic Exam in Children with Cancer. Pediatric Oncology Nurses, Rainbow Babies and Children's Hospital, Cleveland, OH. March 21, 1991.
36. Ethical Issues in Neurology. John Jay High School Science Symposium, Cleveland OH. March 22, 1991
37. Neurologic Causes of Psychiatric Symptoms in Childhood. Pediatric Grand Rounds, The Cleveland Clinic Foundation, April 2, 1991.
38. Anticonvulsant Medication in the Difficult Patient with Seizures. Comprucare Symposium, The Cleveland Clinic Foundation, May 4, 1991.

39. Learning Disabilities in Neurofibromatosis. The Ohio Chapter Annual Neurofibromatosis Symposium, Cleveland, Ohio, May 5, 1991.
40. Management Strategies for Children with Craniopharyngiomas. Pediatric Grand Rounds, The Cleveland Clinic Foundation, May 21, 1991.
41. Actinomycin-D Neurotoxicity. Rainbow Babies & Children's Hospital Tumor Board, May 30, 1991.
42. High-Dose Chemotherapy with Bone Marrow Rescue in Children with Recurrent Malignant Brain Tumors. Neuroscience Grand Rounds, The Cleveland Clinic Foundation, June 24, 1991.
43. The Clinical Aspects of Neurofibromatosis Types 1 and 2. Special Lecture. Great Lakes Rehabilitation Hospital and The Hamot Medical Center. Erie, PA, July 17, 1991.
44. Effects of Neurosurgery and Radiotherapy on Patients with Brain Tumors. Caring Touch Conference. Ritz-Carlton Hotel, Cleveland, OH, September 29, 1991.
45. Adjunctive Therapies in Children with Brain Tumors. Pediatric Rehabilitation Conference, sponsored by Great Lakes Rehabilitation Hospital. Hilton Hotel South, Cleveland, OH, January 18, 1992.
46. Neurofibromatosis 1992 Update: NF1 and NF2. Neuroscience Grand Rounds, The Cleveland Clinic Foundation, February 24, 1992.
47. Molecular Genetics and Neurofibromatosis 1: An Introductory Discussion for the Pediatrician. Pediatric Grand Rounds, The Cleveland Clinic Foundation, March 3, 1992.
48. Ethical Aspects of Anencephaly. Medical Ethics, Shaker Heights High School. March 19, 1992.
49. Neurologic Conditions in Children and Adolescents Presenting with Psychiatric Problems. Psychiatry Rounds. March 24, 1992.
50. Advances in the Treatment of Brain Tumors in Children. Child Neurology Course, The American Academy of Pediatrics. New York City. April 14, 1992.
51. Medical Management of Adults with Neurofibromatosis. Annual Meeting of The Ohio Chapter of The Neurofibromatosis Foundation, Cleveland, OH. April 26, 1992.
52. Recurrent Brain Tumors in Children. Pediatric Tumor Board, Rainbow Babies and Children's Hospital, Cleveland, OH. July 23, 1992.
53. Neurologic and Behavioral Outcome in Children with Craniopharyngiomas: Is There a Case for Less Aggressive Surgery? Health Hill Hospital Grand Rounds, Cleveland, OH. September 1, 1992.
54. Treatable Neuromuscular Diseases. Update 1992. Pediatric Grand Rounds, Cleveland Clinic Foundation, Cleveland, OH. September 22, 1992.
55. Epilepsy and Metabolic Disease. Epilepsy Grand Rounds, Cleveland Clinic Foundation, Cleveland, OH. January 27, 1993.
56. Epilepsy and Metabolic Disease, Pediatric Grand Rounds, Metro Health Center, Cleveland, OH. February 4, 1993.
57. Overview of Current Phase I and II Studies in Childhood Brain Tumors. Children's Cancer Group Affiliates Meeting, Columbus, OH, February 12, 1993.

58. The Treatment of High-Grade Astrocytomas with High-Dose Chemotherapy and Autologous Marrow Rescue, Cancer Center Grand Rounds, Cleveland Clinic Foundation, Cleveland, OH. February 23, 1993.
59. Paroxysmal Non-Epileptic Disorders. American Academy of Neurology Annual Course. New York, New York, May 1, 1993.
60. Neurologic Causes of Learning Disabilities. 1993 Meeting of The Ohio Learning Disabilities Association. Cleveland, OH October 7, 1993.
61. Paroxysmal Non-Epileptic Disorders. Epilepsy and Related Disorders in Children, Pediatric Neurology Course, The Cleveland Clinic Foundation. November 3, 1993.
62. Pediatric Brain Tumors: Advances of the Last Decade. Metro Hospital, Pediatric Grand Rounds, Cleveland, OH December 9, 1993.
63. Pediatric Brain Tumors: Advances of the Last Decade. Fairview General Hospital, Pediatric Grand Rounds, Cleveland, OH. December 17, 1993.
64. Pediatric Brain Tumors Overview, Advances and Effects of Therapy Mt Sinai Hospital, Pediatric Grand Rounds. Cleveland, OH May 20, 1994
65. Leptomeningeal Carcinomatosis. Neurology Grand Rounds. The Cleveland Clinic Foundation. October 12, 1994.
66. Paroxysmal Non-Epileptic Disorders. Epilepsy and Related Disorders in Children, Pediatric Neurology Course, The Cleveland Clinic Foundation. November 2, 1994.
67. Progress in Pediatric Brain Tumors: 1985-1995. Pediatric Grand Rounds, The Cleveland Clinic Foundation. January 24, 1995.
68. Leptomeningeal Carcinomatosis: New Treatments. Cancer Center Grand Rounds. The Cleveland Clinic Foundation January 27, 1995.
69. Leptomeningeal Carcinomatosis: Impact of New Treatments on Pediatric Cancers. Ohio State University/Childrens Hospital of Columbus CCG Affiliated Meeting. Columbus, Ohio, February 16, 1995.
70. The History of Chemotherapy for Brain Tumors. Frontiers in Neuroscience Course, The Cleveland Clinic Foundation. Mamott Hotel, February 26, 1995.
71. Metastasis Cerebrales. Curso Internacional de Actualizacion en Neurologia. Hospital Central Militar, Mexico City, Mexico. March 7, 1995.
72. Tratamiento Actual de los Tumores Cerebrales Primarios. Curso Internacional de Actualizacion en Neurologia. Hospital Central Militar, Mexico City, Mexico, March 7, 1995.
73. Thalidomide as a Potent Inhibitor of Angiogenesis: Possibilities for Utility in Neurofibromatosis. Presented at The NNFF International Consortium for Molecular Biology of NF1 and NF2, Philadelphia, PA. July 16, 1995.
74. Paroxysmal Non-Epileptic Disorders. Intensive Review of Pediatrics, The Cleveland Clinic Foundation. July 19, 1995
75. The Hypotonic Infant. Review Course in Pediatric Neurology. Cleveland Clinic Foundation. November 29, 1995.
76. Thalidomide as a Potent Inhibitor of Angiogenesis: Possibilities for Utility in Neurofibromatosis. Department of Neurology Grand Rounds, November 22, 1995.

77. Pyruvate and Mitochondrial Metabolism. Epilepsy Grand Rounds. The Cleveland Clinic Foundation. March 7, 1996
78. Paroxysmal Non-Epileptic Disorders. Intensive Review of Pediatrics, The Cleveland Clinic Foundation. July 16, 1996
79. Mitochondrial Cytopathies and Oxidative Stress: its Not Just for Kids Anymore. Neurology Grand Rounds. The Cleveland Clinic Foundation. October 30, 1996.
80. Mitochondrial Cytopathies in Pediatrics. Pediatric Teaching Conference. Rainbow, Babies and Children's Hospital, April 17, 1997.
81. Paroxysmal Eon-Epileptic Disorders. Intensive Review of Pediatrics, The Cleveland Clinic Foundation. August 1997
82. Mitochondrial Cytopathies in Pediatrics. Pediatric Grand Rounds. The Cleveland Clinic Foundation. September 23, 1997.
83. Rationale Strategies for Treating Plexiform Neurofibromas and Optic Gliomas in Patients with NF1. Neurofibromatosis Symposium. Ohio Chapter NF Foundation, Cleveland, OH November 9, 1997.
84. Defect in Mitochondrial Function Manifesting as Psychotic Encephalopathy International Mitochondrial Medicine Conference, San Diego, CA February 21, 1998
85. Fatal Status Epilepticus In A 9-Year Old Girl Due to A Defect Mitochondrial Electron Transport Chain Complex II International Mitochondrial Medicine Conference, San Diego, CA February 21, 1998
86. Disorders of Oxidative Metabolism Presenting as Paroxysmal Non-Epileptic Disorders. International Mitochondrial Medicine Conference, San Diego, CA February 21, 1998.
87. Dystonia and Oxidative Phosphorylation. Orthopedic Grand Rounds. Cleveland Clinic Foundation. March 2, 1998.
88. Mitochondrial Cytopathies in Adults: Its not Just for Kids Anymore. University Hospitals of Cleveland, Department of Neurology Grand Rounds. March 6, 1998.
89. New Treatment Strategies for Adult High-Grade Astrocytomas. Rhone-Pollenc Rorer Seminar. Cleveland, OH July 9, 1998.
90. Paroxysmal Non-Epileptic Disorders. Intensive Review of Pediatrics, The Cleveland Clinic Foundation. August 1998.
91. Treatments for Adult High-Grade Astrocytomas. Rhone-Pollenc Rorer Seminar. Columbus, OH September 23, 1998.
92. Mitochondrial Disease in Children. Pediatric Anesthesia Nursing In-Service Seminar. Cleveland Clinic Foundation, September 28, 1998.
93. What do Department Chairmen need to know about CPT Coding? Annual Professors of Child Neurology Meeting, Toronto, Ontario, October 21, 1998.
94. Energy Metabolism in Malignant Glioma: Possibilities for Therapy. 1<sup>st</sup> Annual Cleveland Clinic Foundation Brain Tumor Symposium. Naples, FL. February 16, 1999.
95. Chemotherapy for Plexiform Neurofibromas. 1<sup>st</sup> Annual Cleveland Clinic Foundation Brain Tumor Symposium Naples, FL. February 17, 1999.
96. Newborn Metabolic Emergencies. Combined Metro-CCF Neonatal Lecture Series. Metro Health Medical System, March 23, 1999.

97. Treatments for Adult High-Grade Astrocytomas: The Role for Implantable Chemotherapy Delivery Systems. Rhone-Pollenc Rorer Seminar, Harrisburg, PA, May 5, 1999.
98. Chemotherapy and Malignant Astrocytomas: The Failure of Past Therapies and the Potential for Success with New Treatment Modalities. Sacred Heart Hospital 1<sup>st</sup> Annual Neuroscience Symposium. Allentown, PA, May 6, 1999.
99. Overview of Mitochondrial Cytopathies. Clinical, Pathologic, Biochemical, Genetic and Treatment Survey. Cleveland Clinic Foundation Seminar. Cleveland, OH, May 16, 1999.
100. Mitochondrial Diseases: Recognition of Abnormal Mitochondrial Function. Pediatric Grand Rounds, Rainbow, Babies and Children's Hospital. June 17, 1999.
101. Medical Therapeutic Strategies for Neurofibromatosis I: Cis-Retinoic Acid, Interferon Alpha and Thalidomide. Pediatric Grand Rounds. University of Florida at Gainesville, Gainesville, FL. July 9, 1999.
102. Chemotherapy and Malignant Astrocytomas: Molecular Genetics, Therapeutic Failures and Hope with New Treatments. Danville, PA. July 27, 1999.
103. Management Strategies for Low-Grade Astrocytomas. Current Management of Neurologic Disorders. Cleveland Clinic Foundation. Cleveland Marriott Hotel. Cleveland OH. August 13, 1999.
104. Paroxysmal Non-Epileptic Disorders. Intensive Review of Pediatrics, The Cleveland Clinic Foundation. September 1, 1999.
105. The Muscular Dystrophies. Intensive Review of Pediatrics, The Cleveland Clinic Foundation. September 3, 1999.
106. The Clinical Manifestations of Neurofibromatosis I. The Brain and Learning: Educational Implications of Neurologic and Psychiatric Disorders. 4<sup>th</sup> Annual CCF Learning Assessment Clinic Lecture Series. Cleveland, OH. December 3, 1999.
107. Making Sense of Respiratory Chain Analysis. NIH Minisymposium on Mitochondrial Diseases. National Institutes of Health, March 14, 2000.
108. Disorders of Oxidative Phosphorylation and their Relationship with Epilepsy. Epilepsy and Sleep Disorders Grand Rounds. Cleveland Clinic Foundation, March 23, 2000.
109. Adult Presentations of Mitochondrial Disorders. Internal Medicine Grand Rounds, University Hospital's of Cleveland. April 18, 2000.
110. Clinical Presentations of Mitochondrial Cytopathies in Children and Adults. Mitochondrial Cytopathies 2000. Cleveland, OH. June 1, 2000.
111. Mitochondrial Cytopathies 2000. Pediatric Grand Rounds. Cleveland Clinic Foundation. October 17, 2000.
112. Mitochondrial Cytopathies: An Overview for Occupational and Physical Therapists. Cleveland Clinic Foundation. October 12, 2000.
113. Commonly Asked Questions by Parents and Caregivers. UMDF Ohio Chapter Meeting. October 21, 2000.
114. Overview of the Clinical Aspects of Mitochondrial Cytopathies. Cleveland Clinic Neuroscience Nursing Conference, Cleveland Ohio. November 16, 2000.



1 15 ICD-9 and CPT Coding for Neurologists in 2001 Children's Hospital of Michigan-Wayne State University Medical  
Center Neurology Grand Rounds December 15, 2000

12/06/2000