

Sheldon Mitchell vs. Arkansas Department of Transportation

Cause No. 14-0673-CC

Sheldon's Burden of Proof- Preponderance of Evidence/Greater Weight

- ▶ Sheldon has the duty to prove over 50% of the credible evidence in order to prevail. Sheldon has already met his burden on liability. The only question remaining is the amount of damages.



Life *Before* the Accident

- Sheldon graduated high school with a **3.85** GPA; ranked 49/649.
- Attended Utah State University in Logan, UT working to complete a bachelor's degree.
- Hoped to complete a Master's of Science in computer programming.
- Aspired to own his own business writing computer programs for businesses.
- *Rising star* on the wrestling team.
- Led an active lifestyle.

The Accident:

- March 8, 2011 at 6 p.m.
- Traveling to the club wrestling Nationals in Georgia.
- Seated in the back left seat in his teammate's vehicle traveling close to the speed limit on Interstate 40.
- A pavement marker that was supposed to be permanently anchored into the highway became airborne, and penetrated through the front windshield, violently striking Sheldon Sheldon in the forehead, along his hairline.









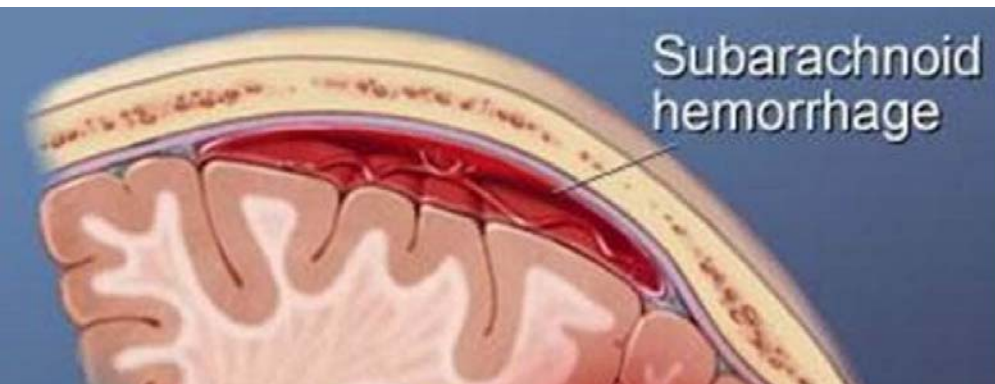
CT Findings Two-Weeks Post-Accident

FINDINGS: No old studies available for comparison.

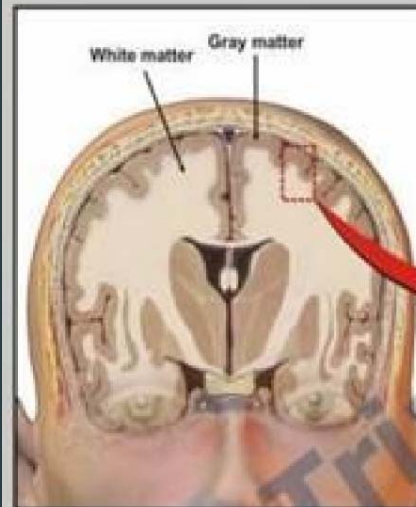
There is no evidence of a focal mass lesion, mass effect upon the brain parenchyma. There is a small amount of posttraumatic subarachnoid hemorrhage adjacent to the right frontal lobe just deep to the anterior calvaria and frontal sinuses. The bone windows show a fracture of the calvaria in the bifrontal area, the fracture lines traverse a portion of the right frontal sinus and violates the inner diploic space into the epidural space. Series 3 image 13 through 22. The fracture of the anterior wall of the right frontal sinus is depressed 2 mm into the sinus. Again the fracture line traverses through the frontal sinus and traverses the inner the diploic table into the epidural space.

IMPRESSION:

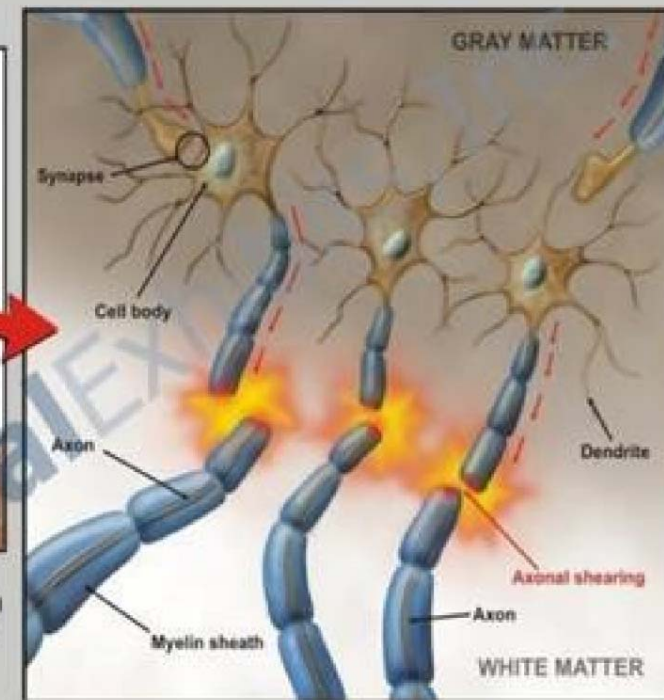
1. Fracture through the frontal sinus as described above. This violates the inner diploic space and communicates with the epidural space. There is a small amount of posttraumatic subarachnoid hemorrhage adjacent to the right frontal lobe



DIFFUSE AXONAL INJURY



Sudden acceleration-deceleration forces cause injury to the brain.



The injury is greatest in where the density difference is greatest.
Most tearing occurs at the gray-white matter junction.

Life *After* the Accident

- Sheldon was hoping to be scouted at the wrestling nationals, but due to the accident, he never made it, and never got to wrestle again.
- He returned to school **feeling lost**: having bad headaches, trouble concentrating and difficulty focusing. He had to frequently leave class for breaks.
- He received **failing grades for the first time** and had to change his major to a less stressful area of study.
- Transferred to the University of Utah (Salt Lake City) to be closer to home.
- Sheldon **had to quit jobs** like Arbitor Sports (software company of the NCAA) because computer use aggravates his daily headaches.
- He cannot concentrate/focus for any appreciable length of time without subsequent headaches.
- Sheldon is afraid of taking narcotic/opiate pain medications, instead he makes full use of OTC painkillers.
- Long-term side effects: A study published in the Journal of Clinical and Experimental Psychology found that 60% of Traumatic Brain Injury victims showed signs of emotional dysfunction. **TBI's also increase the risk of epilepsy, Alzheimer's disease and Parkinson's disease.**

Academics *After* the Accident

SUBJ NO.	COURSE TITLE	CRED GRD	PTS R
INSTITUTION CREDIT:			
Fall 2010			
ECN 1500	ECON INSTITUTIONS (BAI)	3.00 C	6.00
MATH 0900	ELEMENTS OF ALGEBRA	3.00 P@	0.00
PE 1900	CLUB SPORTS	1.00 P	0.00
SOC 1010	INTRO SOCIOLOGY (BSS)	3.00 C+	6.99
USU 1010	UNIVERSITY CONNECTIONS	2.00 A	8.00
Ehrs: 9.00 GPA-Hrs: 8.00 QPts:		20.99	GPA: 2.62
Good Standing			
Spring 2011			
BIOL 1010	BIOL & THE CITIZEN (BLS)	3.00 W	0.00
MATH 1010	INTERMEDIATE ALGEBRA	4.00 F	0.00
USU 1330	CIV: CREATIVE ARTS (BCA)	3.00 D	3.00
USU 1360	IPS: ENERGY (BPS)	3.00 W	0.00
Ehrs: 3.00 GPA-Hrs: 7.00 QPts:		3.00	GPA: 0.42
Academic Warning			
***** TRANSCRIPT TOTALS *****			
	Earned Hrs	GPA Hrs	Points GPA
TOTAL INSTITUTION	12.00	15.00	23.99 1.59
TOTAL TRANSFER	0.00	0.00	0.00 0.00
OVERALL	12.00	15.00	23.99 1.59
***** END OF TRANSCRIPT *****			

Before the Accident:

- Fall 2010 GPA: 2.62

Accident: March 8, 2011

- Spring 2011 GPA: 0.42
 - F Average
- 2010-2011 GPA: 1.59

Sheldon's GPA per Post-Accident Year-

Excluding repeated courses, because Sheldon **never** failed a class prior to the accident.

- ▶ Fall 2010 PRE-ACCIDENT GPA- **Cumulative 2.62**
- ▶ Spring 2011 Semester IMMEDIATELY POST-ACCIDENT- .42/Fall 2011 Semester- 2.21- **Cumulative 1.31**
- ▶ Spring 2012 Semester- 2.285/Fall 2012 Semester- 2.285/Summer 2012 Semester- 1.7- **Cumulative 1.32**
- ▶ Spring 2013 Semester- 2.70/Fall 2013 Semester- .42- **Cumulative 1.56**
- ▶ Spring 2014 Semester- **Cumulative 2.236**
- ▶ **Total Cumulative GPA Post-Accident: 1.60**
- ▶ **ONE ENTIRE LETTER GRADE REDUCTION IN GPA**

Sheldon's Symptoms and Chronic Conditions

- Chronic **DAILY** migraines
- Difficulty concentrating
- Involuntary movements; twitching
- Hearing loss
- Double and blurred vision
- Dizziness
- Reduced stamina
- Reduced physical activity
- Fatigue
- Depression

Current Status

- Traumatic Brain Injury (TBI) reduces brain network efficiency-decreased capacity and global functional impairment.
- The accident **derailed** Sheldon's future goals and plans.
 - Forced to withdraw from **his original higher paying degree plan**.
 - Obtained degree in sociology and feels burned out after seven years.
 - Substantially delayed workforce entry.
 - Afraid master's degree program is beyond his ability.
- Gained 70 lbs; unable to be active like he was before.
- Wakes up every 2-3 hours of sleep; mentally fatigued by noon everyday.
- He's worrisome, anxious, irritable, withdrawn, and less confident.
- **Constant fear and anxiety** for his future.

Dr. Randall Reed Benson, M.D.

Sheldon was seen by Dr. Benson on March 30, 2016

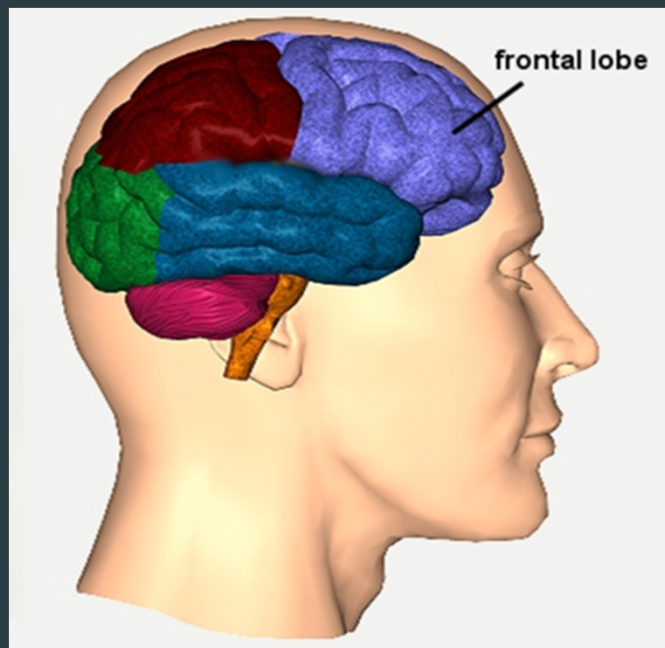
- World-renowned board certified neurologist.
- Globally recognized leader in brain injury research.
- Fellowship training in behavioral neurology and functional neuroimaging.
- 2001-2011- appointed assistant professor in Neurology at Wayne State University.
- **Pioneered the use of a new technique, fMRI (FDA approved).**
- 2011 opened up a nonprofit Center for Neurological Studies that is devoted to advancing the understanding and treatment of brain injury.

Dr. Randall Reed Benson, M.D.

Sheldon was seen by Dr. Benson on March 30, 2016

- Investigator on research supported by globally recognized institutions including: **U.S. Department of Defense, the National Institute of Health, the National Football League**, etc.
- Studied and treated *dozens* of NFL players.
- Testified 20+ times in the last five years all over the country and his testimony has *never* been ruled inadmissible, nor has it ever been refused.
- Testified before the **United States House Judiciary Committee** to assist the committee in evaluating the causes, symptoms, and effects of brain/neurological injuries in football through advanced imaging techniques (same testing used to evaluate Sheldon).

The Frontal Lobe



Emotional Control Center:

- Personality
- Behavior
- Learning
- Voluntarily movement

Controls cognitive skills:

- Motor Function- right and left hand deficits
- Problem Solving- executive thinking
- Spontaneity- anxious, fearful
- Impulse control- affected by negative emotions
- Memory- impaired; see GPA drop, 2.62 to F Level 0.42
- Attention
- Language
- Initiation
- Judgment
- Social

Figure One- T1, T2, FLAIR, SWI, GE

Pg. 21 in Dr. Benson's report

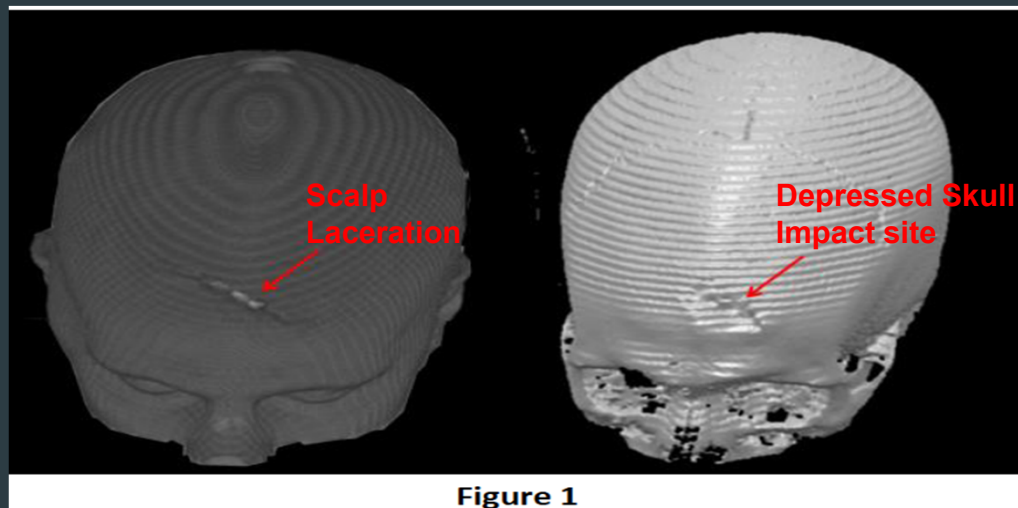


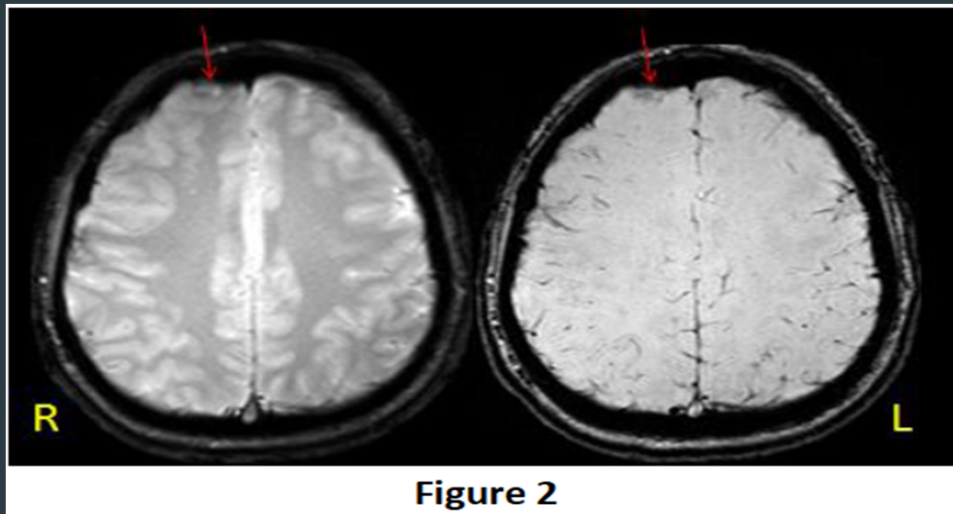
Figure 1

- On the left is a **scalp laceration**.
- On the right is Sheldon's **depressed skull fracture**, that **destroyed brain tissue** in his frontal lobe.
- Medically Undisputed- The frontal lobe, where Sheldon's injury occurred, controls high level cognitive/core functioning.

Figure Two

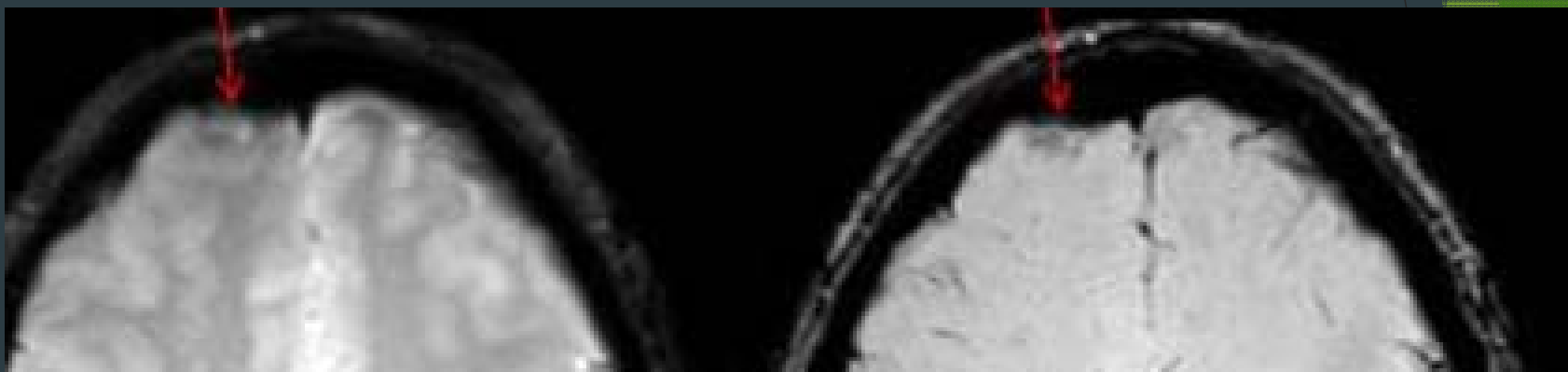
Pg. 22 in Dr. Benson's report

- A small contusion/bruise at the tip of the high right frontal lobe is seen, along with retained iron-indicating some **bleeding**.
- Sheldon has **encephalomalacia** that is undoubtedly due to the **depressed skull fracture** directly indenting that part of his frontal lobe on the right side.



Dr. Benson's Diffuse Tensor Imaging
Showing the Actual Encephalomalacia,
or the permanent loss of brain tissue
after an injury, five years post accident.

Deposition of Dr. Benson, Page 22 Line 19



Encephalomalacia

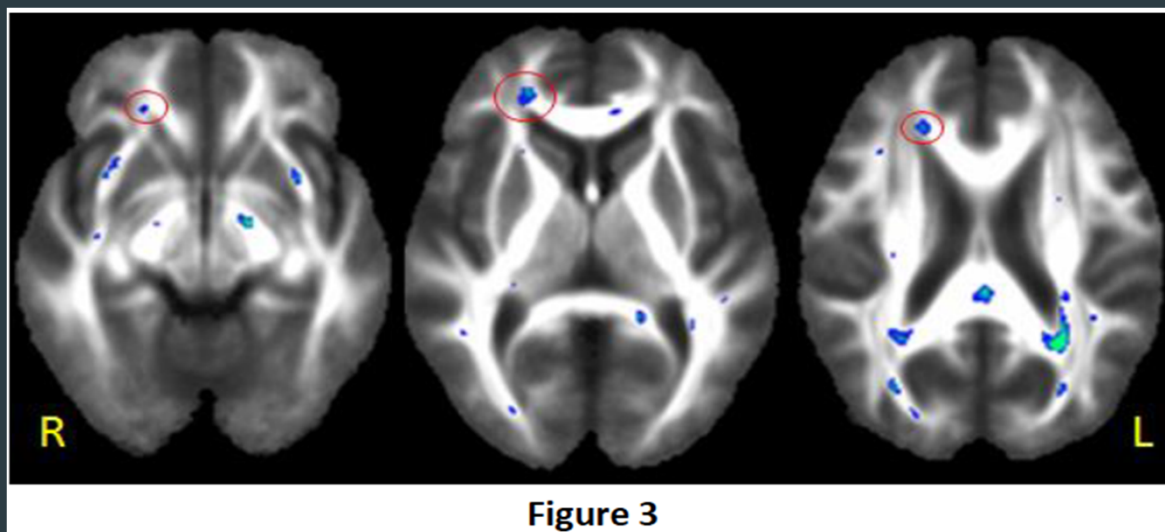
Encephalomalacia is **permanent loss of brain tissue** after an injury. This destroyed frontal lobe brain tissue, that controls his executive and higher level functioning, will never regrow or regenerate.

Symptoms Include:

- **Severe headaches**
- Head-spinning sensation and **vertigo**
- **Memory loss** and mood swings
- Clumsiness and diminished coordination
- **Visual impairment** that may be permanent or temporary
- Extreme drowsiness

Figure Three DTI Scan Using FA

Pg. 22 in Dr. Benson's report

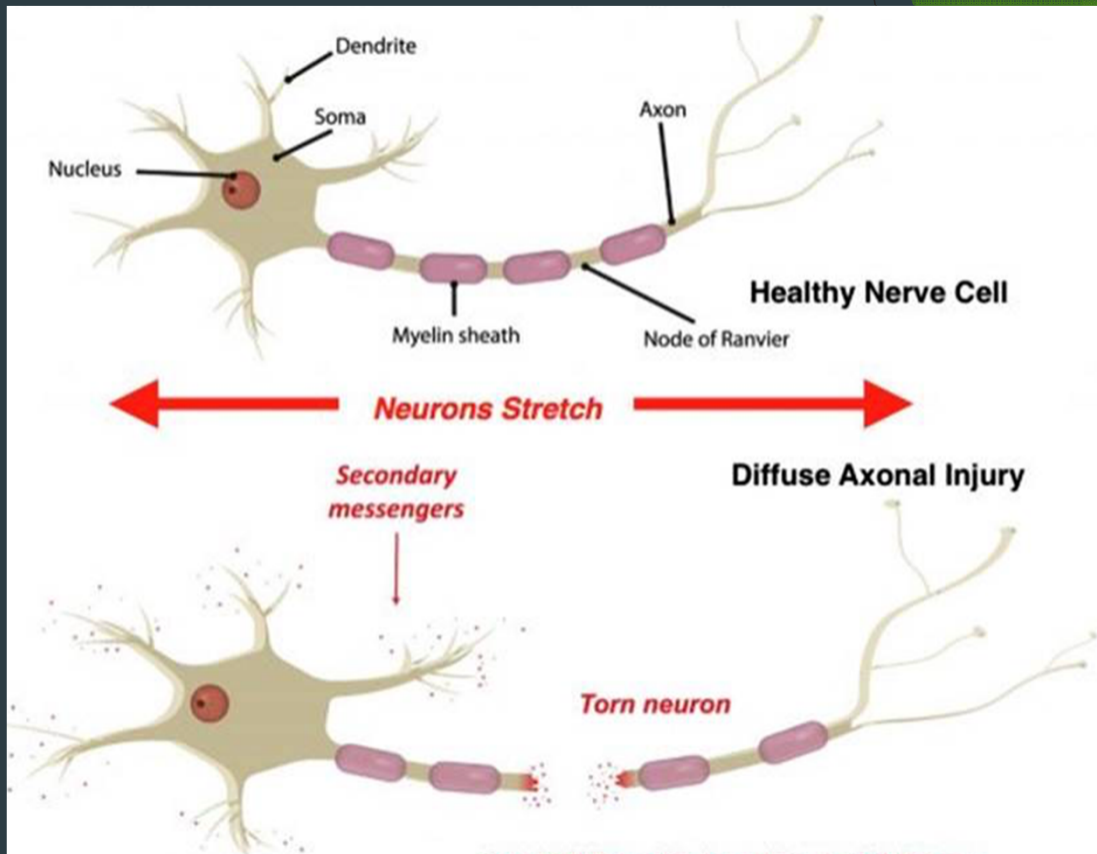
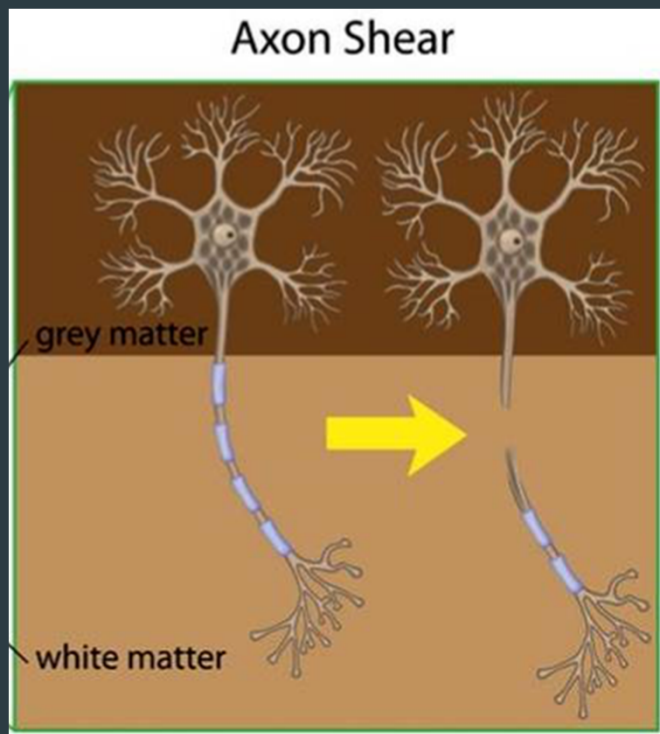


- Consistent finding in the right frontal lobe- which indicates **axonal injury**.
- White matter continuation of the cortical surface injury.
- Skull fracture outside the brain.
- There is **damage seen in the frontal lobe**, the brain stem, and towards the back of the brain-which is commonly seen in acceleration/deceleration injuries.
- Some of Sheldon's symptoms can be directly correlated with these findings.

Significance of DTI Testing

- Advanced MR imaging technique- able to reveal brain injuries where CT scans and conventional MRI appear normal.
- Sensitive to the 3D flow of water inside and outside of white matter fibers.
- **Detects damaged white matter fibers (axons)** that alter the flow of water molecules.
- White matter fibers allow for efficient transmission of information between neurons.
- **The diffuse axonal injury (DAI) damages white matter fibers, resulting in cognitive deficits:**
 - Slowed information processing
 - Decreased attention
 - Decreased memory
 - Psychiatric symptoms
- DAI accounts for most of the neurological disability in TBI.

Diffuse Axonal Injury



Advanced MRI Shows the Following:

- There is a hyperintensity (small scar) in the left frontal lobe. There is damage to both frontal lobes, worse on the right. Page 23, Line 3-14, Deposition of Dr. Benson.
- The fact that Sheldon blacked out and had post traumatic amnesia suggests that a good portion of his brain was nonfunctional for a period of time-which is consistent what the imaging is telling us- it's a diffuse injury. Page 24, Line 13-17, Deposition of Dr. Benson.

Dr. Benson's Summary of Findings

Report of Dr. Benson Page 18

- FLAIR reveals a hyperintensity at the gray-white junction left anterior, superior frontal lobe.
- Gradient echo and SWI reveal a right frontal small contusion.
- Global WM FA mean was at the 10th percentile relative to the normal range.
- DTI regional analysis revealed that 37/48 white matter regions had lower mean FA values than the mean of the control group.
- DTI voxel-wise analysis revealed multiple white matter tracts with abnormally reduced FA.
- DTI findings reveal right frontal focal and acceleration/deceleration-induced diffuse axonal injury to the bilateral cerebral hemisphere.

Dr. Benson's Summary and Opinion Report of Dr. Benson Page 18

- There is little doubt that Sheldon sustained a traumatic injury as a result of his injury on March 8, 2011.
- Sheldon's symptoms are largely explained by reduced cognitive efficiency and frontal lobe impairment resulting from focal frontal and multifocal white matter dysfunction caused by his TBI.
- **Five lines of evidence supporting TBI: biomechanical, clinical symptoms, neurobehavioral findings, neuropsychological findings, and brain imaging findings including acute CT and chronic MRI.**
- **"[Sheldon] will be dealing with the fallout or the consequences of this injury for the remainder of his life."**

Dr. Benson

Neurologist: specific type of **medical doctor** who is trained in assessing, diagnosing, and treating disorders of the brain and nervous system.

Dr. Benson performed brain imaging using advanced MRI techniques in his evaluation.

Education

- B.A. in Biology, Washington University
- M.D., Hahnemann University

Residency

- Neurology, Boston University School of Medicine, 1991-1993

Fellowship Training

- Behavioral Neurology and Functional Neuroimaging, Massachusetts General Hospital (largest teaching hospital of Harvard Medical School)

Licensure and Board Certification

- Active license in the State of Michigan
- National Board of Medical Examiners, 1987
- Diplomate, American Board of Psychiatry and Neurology, 1996 and 2008

Dr. Souheaver

Neuropsychologist: assesses brain functioning based on an individual's pattern of strengths and weaknesses.

NOT a medical doctor.

Disagreements between Dr. Benson and Dr. Souheaver

Deposition of Dr. Benson

- People with TBI are frequently misdiagnosed, often by *multiple* physicians.
 - Two psychologists studying the same patient may differ considerably regarding existence of TBI.
- Disagrees largely with Dr. Souheaver's conclusions.
- Disagrees that treating Sheldon's emotional symptoms would ameliorate Sheldon's cognitive symptoms because the emotional symptoms are an **appropriate and direct response** to his **loss in cognitive function** and headaches due to the primary issue, Sheldon's brain injury. Emotional symptoms are a secondary issue.
- Disagrees with the use of the word mild when Dr. Souheaver described Sheldon's condition as "a few mild deficits" because Sheldon is functioning at about **65-75%** of what he did pre-injury. He isn't functioning the way he was used to and has had to make dramatic life changes due to the **life-altering accident**.

Work History

Date	Company
August 2008- July 2010	Delton Sports Center
2010, 2011, 2014	West Valley City
April 2012-October 2012	PetSmart
April 2014-July 2014	Cinemark/Century
2014-2016	ArbitorSports

- Sheldon **had to quit ArbitorSports due to prolonged computer** use that causes frequent chronic headaches.
- He returned to West Valley City, he likes this work because while it is physically challenging, he is able to focus better since it doesn't require prolonged computer use or use executive functioning skills.

Pre-Injury Earning Capacity

Report of Kacy Turner

- The accident **delayed entry** into the workforce.
- Sheldon had not yet established his earning capacity.
- The **median wage of computer programmers** in Utah, **\$81,430** (2016), represents his pre-injury earning capacity.

Time Period	Pre-Injury Earning Capacity
Past	\$149,868
Future	\$3,014,394
Total	\$3,164,262

Post-Injury Earning Capacity

Report of Kacy Turner, Page 8

Time Period	Post-Injury Earning Capacity Scenario 1	Post-Injury Earning Capacity Scenario 2
Past	\$41,178	\$35,307
Future	\$2,146,951	\$1,511,240
Total	\$2,188,129	\$1,546,547

Scenario One

- Future earning capacity as an average college graduate, **\$65,132** (2016).

Scenario Two

- Lower future earning capacity at the 25th percentile of college graduates, **\$43,592** (2016)

Calculation of Damages

Report of Kacy Turner Page 12

Time Period	Pre-Injury Earning Capacity	Post-Injury Earning Capacity Scenario 1	Lost Earning Capacity
Past	\$149,868	\$41,178	\$108,690
Future	\$3,014,394	\$2,146,951	\$867,443
Total	\$3,164,262	\$2,188,129	\$976,134

Time Period	Pre-Injury Earning Capacity	Post-Injury Earning Capacity Scenario 2	Lost Earning Capacity
Past	\$149,868	\$35,307	\$114,560
Future	\$3,014,394	\$1,511,240	\$1,503,155
Total	\$3,164,262	\$1,546,547	\$1,617,715

- Scenario One: loss of earning capacity as average college graduate is **\$976,134**.
- Scenario Two: loss of earning capacity as lower 25th percentile of his class is **\$1,617,715**.

Future Care Recommendations

Report of Amy Mackenzie, Ph.D., R.N., CLCP

Routine Medical Care

- Sheldon will need **annual visits for life** to a neurologist for treatment of his headaches and monitoring of complications (seizures, early cognitive decline) related to TBI.

Medications

- Sheldon needs a preventive headache medication 2x/day over the lifespan.
- He would benefit from an antidepressant over the lifespan
- He would benefit from medication to help with concentration over the lifespan.
- He will continue to need ibuprofen for head and neck pain.

Future Care Recommendations

(Continued)

Projected Therapeutic Modalities

- Sheldon needs cognitive therapy for about two hours, three times a week, for six weeks.
- He would benefit from individual adjustment counseling to adjust to the reality of life after his brain injury weekly for three months, biweekly for six months and four sessions per year over the remaining lifespan.
- Other pain management includes guided imagery and monthly massages for a year.

Diagnostics

- Sheldon needs a full pituitary function evaluation.

Reasonable and Necessary Medical Care Costs

Present Value of RPC Recommendations
\$372,109

- Present value of RPC recommendations is **\$372,109**.
- **Historically prices have increased**, and the prices of many health care goods and services has increased at a faster rate than all goods and services.
- These costs are not the only evidence of what his medical costs are and will be. **The State never presented any evidence to refute these numbers.**

Current Amount Awarded to Sheldon

Claims Commission Ruling	\$115,000
Products Liability Case	\$10,000 (manufacturer of reflector)+\$9,500 (manufacturer of epoxy glue)= \$19,500
Amount Awarded to Sheldon	\$115,000+\$19,500= \$134,500

Costs	\$80,000
Attorney Fee	40% (\$134,500-\$80,000= \$54,500) = \$21,800
Total Cost of Expenses	\$80,000+\$21,800= \$101,800

Amount Awarded Subtracted by Expenses	\$134,500 - \$101,800 = \$32,700
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Presentation Summary

- Amount Awarded Subtracted by Expenses: **\$32,700**
- Present value of RPC recommendations: **\$372,109**
- We ask that the Committee award costs to Sheldon independently because of the 7-year long battle for him to get here.
- Sheldon suffers from daily symptoms and chronic conditions.
- Because of the accident, Sheldon's entry into the workforce was delayed (transferred schools, failed classes, had to change his major to less stressful, less paying field, full letter grade reduction in GPA without retakes), and as a result he had to change his career trajectory from Computer Technology to Sociology.
- His future earning capacity is now much less than before by **\$976,134.00-\$1,617,715.00.**
- Pain and Suffering for Past and Future: Unlimited but Based on Reason
- Mental Anguish for Past and Future: Unlimited but Based on Reason
- Physical Impairment for Past and Future.
- Physical Disfigurement.
- Medical Care: **\$372,109**
- Costs: **\$75,228.14 Plus Recent**
- **Loss of Enjoyment of Life**