UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

JENNIFER BRADLEY, Plaintiff, v. UNITED STATES OF AMERICA, Defendant.	)	Civil Action No. 16-346 (RBW)

MEMORANDUM OPINION

The plaintiff, Jennifer Bradley, brings this civil action against the defendant, the United States of America, asserting common law claims of negligent infliction of emotional distress and medical malpractice resulting from the medical treatment provided to her by Dr. Aaron Williams, who was employed by the defendant when the plaintiff was under his care.[1] See Notice of Removal of a Civil Action ("Removal Notice"), Exhibit ("Ex.") 5 (Amended Complaint ("Am. Compl.")) ¶¶ 137–46, 157–73, 195–205. A bench trial addressing the plaintiff's claims began on September 9, 2021, and the presentation of the evidence concluded on September 14, 2021. Thereafter, the parties submitted their proposed findings of fact and conclusions of law. See Plaintiff's Ren[e]wed Proposed Findings of Fact and Conclusions of Law ("Pl.'s Mem."), ECF No. 191; Defendant United States of America's Proposed Findings of

[1] In her Amended Complaint, the plaintiff also brought claims against the National Collegiate Athletic Association ("NCAA"); the Patriot League; American University; the Maryland Sports Medicine Center; David L. Higgins, M.D. P.C. ("the Higgins Practice"); and David L. Higgins, M.D. See Am. Compl. ¶¶ 4–10. On April 12, 2017, the Court granted the Patriot League's motion to dismiss and dismissed the plaintiff's claims against the Patriot League. See Bradley v. Nat'l Collegiate Athletic Ass'n, 249 F. Supp. 3d 149, 156 (D.D.C. 2017) (Walton, J.) ("Bradley I"). On May 29, 2022, the Court granted motions for summary judgment filed by American University, the Maryland Sports Medicine Center, the Higgins Practice, and Dr. Higgins, jointly, and by the NCAA, see id. at Bradley v. Nat'l Collegiate Athletic Ass'n, 464 F. Supp. 3d. 273, 280 (D.D.C. 2020) (Walton, J.) ("Bradley II"), and entered judgment in their favor, see Order at 1 (May 29, 2020), ECF No. 137. Accordingly, the United States of America is the sole remaining defendant in this case.

Fact and Conclusions of Law ("Def.'s Mem."), ECF No. 185; see also Plaintiff's Suppl[e]mental Bench Memo on Non-Economic Damages ("Pl.'s Supp."), ECF No. 192. On April 22, 2022, the Court issued an oral ruling in favor of the plaintiff on her medical malpractice claim against the defendant. What follows are the Court's detailed factual findings and legal conclusions.

I. FACTUAL FINDINGS

During the bench trial in this case, the plaintiff presented the following witnesses: (1) the plaintiff; (2) the plaintiff's father, Thomas M. Bradley; (3) the plaintiff's mother, Lori Bradley; (4) Dr. Robert Clark Cantu, as an expert in the field of neurosurgery and, specifically, on concussions; and (5) Dr. Joseph Crouse, as an expert in the field of vocational rehabilitation and economics, regarding damages. The defendant presented the following witnesses: (1) Jenna Earls, the American University field hockey team athletic trainer; (2) Dr. Williams, whose treatment of the plaintiff is at issue in this case; (3) Dr. Katherine Margo, as an expert in the field of family medicine; (4) Dr. Kevin deWeber, the director of the medical fellowship in which Dr. Williams was participating at the time of his treatment of the plaintiff; (5) Sean Dash, the head athletic trainer at American University; and (6) Dr. David Higgins, the sports team physician at American University who was allegedly responsible for supervising Dr. Williams during his treatment of student-athletes at American University. In addition, both parties introduced the deposition testimony of Dr. William R. Vollmar II, the plaintiff's primary care physician who treated the plaintiff for symptoms related to her concussion from January 2012 through, at least, June 2016. See Sept. 10, 2021 Tr. at 354:5–389:20 (designation by the plaintiff); Sept. 14, 2021 Tr. at 798:11–804:19 (designation by the defendant).

A. The Plaintiff's Injury

In 2011, the plaintiff was an undergraduate student in the District of Columbia at American University, where she played varsity field hockey. See Transcript of Bench Trial – Day 1 ("Sept. 9, 2021 Tr.") at 30:17–24, ECF No. 179. Prior to the Fall 2011 field hockey season, the plaintiff signed an Acknowledgement of Risk form, which stated:

> I desire to participate in the sport identified below ("Sport") at American University ("University"), and, in consideration of being allowed to participate in the sport, I hereby acknowledge and agree as follows:
>
> I acknowledge that I am participating in these activities voluntarily.
>
> I have consulted with a medical doctor regarding my personal medical needs. I represent that I am fit to participate in sport[-]related activities and that there are no health-related reasons or problems, which preclude or restrict my participation in sport[-]related activities.
>
> I understand that participation in intercollegiate athletics involves a risk of injury which may range in severity from minor to catastrophic, including, but not limited to[,] serious permanent paralysis, bone/joint or other bodily injury, concussions, other chronic disabling conditions[,] and even death. I further understand that such injuries may occur in the absence of negligence.
>
> To minimize the risk of injury, I agree to obey all safety rules, to report fully any problems related to my physical condition to appropriate University personnel, including medical personnel and coaches, to follow prescribed conditioning programs[,] and to inspect my athletic equipment daily.
>
> My signature below indicates that I am aware of the risks of injury inherent in athletic activities and that such risks may include death, paralysis[,] and other serious permanent bodily injury. I am willing to assume responsibility for any and all such risks of injury while participating in intercollegiate athletics at the University.
>
> I (including my parents, legal guardians, and legal representatives) hereby agree to indemnify, defend[,] and hold harmless the University and its employees, officers, agents from any claims, demands, or suites for damages which may arise from my participation in the University's Intercollegiate Athletic Programs; or from any treatment, medical, or otherwise provided to me by the University's Sports Medicine Staff. Further, I absolve, indemnify, defend[,] and hold harmless American University from any breach of these presentations.

Def.'s Ex. 15-2 (emphasis added).[2]

On September 23, 2011, see Sept. 9, 2021 Tr. at 40:19–21, during a field hockey game in Richmond, Virginia, see id. at 37:23–25, the plaintiff was struck in the head by an opposing player's shoulder, see id. at 38:16–18. The plaintiff testified that, following the impact, she "felt strange[,]" id. at 38:21, and "a little, like[,] confused[,]" id. at 39:6. However, the plaintiff heard her coach "yelling, 'Get back, get back[,]"so she "just listened to [her coach] and played[,]" id. at 38:21–23. Two days later, on September 25, 2011, the plaintiff began to experience issues with her vision, including that her "eyes were not tracking correctly[,]" id. at 42:19–20, and felt "that [she] could[ ]n[o]t really think[,]" id. at 43:1–2. See Pl.'s Ex. 44.[3]

Despite these symptoms, the plaintiff continued to practice and play in games with the field hockey team from September 25, 2011, through October 2, 2011. See Sept. 9, 2021 Tr. at 41:11–16, 42:16–25 (playing in a game against Boston College on September 25, 2011); id. at 44:3–5 (practicing from September 27, 2011, to September 30, 2011); id. at 126:1–4 (playing in a game against Lehigh University on October 1, 2011); id. at 126:5–6 (playing in a game against Temple University on October 2, 2011). Nonetheless, the plaintiff testified that she "was scared and confused" and "felt like [her symptoms were] going to go away, but [they] didn't." Id. at 43:21–22.

B. The Plaintiff's Reporting of Her Injury

On October 1, 2011, after a game against Lehigh University, the plaintiff reported her symptoms to her field hockey coach, Steve Jennings, and the field hockey team's athletic trainer,

[2] Both the plaintiff and the defendant cite the Acknowledgement of Risk form as defendant's Exhibit 11, however, the binder provided to the Court with the defendant's exhibits does not include this form at Exhibit 11. Rather, the Acknowledgement of Risk form is located at the defendant's Exhibit 15-2.

[3] Plaintiff's Exhibit 44 is a timeline prepared by the plaintiff and her mother "in the fall of 2012[,] . . . probably September or October of 2012." Sept. 9, 2021 Tr. at 174:8–12.

Jenna Earls. See id. at 44:19–45:19. The plaintiff testified that she told Jennings and Earls that she "c[ould]n't think, and it[wa]s scaring [her], and [she] c[ould]n't see correctly." Id. at 45:2–3. She also told Earls that she "couldn't think and [ ] couldn't understand, and [ ] couldn't see correctly." Id. at 45:18–19. The plaintiff testified that Jennings told her to "eat some ice cream and get some rest." Id. at 45:8.

As the team athletic trainer, see id. at 17:24–25, Earls was the team's "liaison[.]" Id. at 37:3. This meant that "if something was wrong physically, like [a player] felt hurt, then [Earls wa]s the person [the player] would go to first, or the person . . . that[wa]s going to take care of [an injured player,]" such as by "get[ting a player] a doctor appointment, or [ ] wrapping a[player's] ankle." Id. at 37:4–9.

On October 2, 2011, the plaintiff, along with her mother, Lori Bradley, spoke to Earls after the game against Temple University. See Pl.'s Ex. 3 at 10032. In her notes of the conversation, Earls wrote that the plaintiff

> approached [Earls] after [the] game with her mother on [October 2, 2011,] saying she has been having difficulty with her vision while playing, an increase in fatigue, and getting dizzy while playing. [The plaintiff] says she's been experiencing it for about [two] weeks. [The plaintiff] has a history of hypoglycemia, mono[nucleosis], and low blood pressure. When asked if she remembers getting hit in the head in a game[,] she replied[,] "I mean, nothing worse than usual. I got hit in Richmond by some girl's shoulder[,] but I get hit like that all the time, I didn't think it was anything significant." [The plaintiff] did not notify [Earls earlier] of being hit nor complain[] of any [symptoms] following.

Id. On October 3, 2011, the plaintiff sent an email to Earls, stating:

> I think I might have been a little confusing with how I described the way I was feeling before. I wrote out all my symptoms for you more clearly—
>
> - Always extremely tired[. E]ven after sleeping a good amount[,] sometimes I feel like I can't keep my eyes open and I always feel like I could fall asleep.

- Cannot concentrate for any amount of time[. It] takes me a long time to finish tasks or read and have to take frequent breaks. My sense of time seems off as well[.]
- Fast things seem like they are moving in snapshots rather than a fluid motion and it[']s hard to focus my eyes on something.
- When playing, I feel dizzy and unfocused[. I]t's hard to concentrate on tactical things like the press[.]
- Feel like things are not real and easily forget things. Also hard for me to analyze something. (When I am playing I'm not really sure if what I'm doing is "good" or not)[.]
- When I have to interact with someone, I feel like my answers/[]actions are delayed[.]
- When walking among people I feel like I'm in a daze[,] like maybe I'm not actually there ("dream[-]like" feeling)[.]
- Pressure in my head[. N]ot a headache, but have a constricting feeling in my forehead[.]

I've been having these symptoms for over a week and cannot pinpoint a cause. I tried to sleep more, eat better and more, and to take more sugar in and none of this has improved the situation.

Pl.'s Ex. 1.

Earls testified that, after receiving the plaintiff's October 3, 2011 email, a concussion was one of the most serious possibilities on her "list of concerns[.]" Transcript of Bench Trial – Day 3 (Sept. 13, 2021) ('Sept. 13, 2021 Tr.") at 428:20–22, 429:4–8, ECF No. 181. Earls then scheduled a doctor's appointment for the plaintiff with Dr. Aaron Williams for October 5, 2011. See Sept. 9, 2021 Tr. at 48:20–23. Dr. Williams was a fellow with the Military Primary Care Sports Medicine Fellowship (the "fellowship"), see Def.'s Ex. 5, who, as part of his fellowship, was working for Dr. David Higgins, the sports "team physician for American University[,]" Sept. 13, 2021 Tr. at 468:24–25.

Earls led the plaintiff through a series of Special Concussion Assessment Tool 2 ("SCAT2") tests. See Pl.'s Ex. 2. A SCAT2 test is a tool for "the acute [ ] assessment of a concussion" that "involves a symptom checklist" and "a number of cognitive tests[.]" Transcript of Bench Trial – Day 2 (Sept. 10, 2021) ("Sept. 10, 2021 Tr.") at 219:18–21, ECF No. 180; see

also Pl.'s Ex. 17 at 11000 ("This tool represents a standardized method of evaluating injured athletes for concussion[.]"). The plaintiff had previously taken a baseline SCAT2 test on August 10, 2010, see Pl.'s Ex. 17; Def.'s Ex. 11A, at a time when she was still recovering from mononucleosis, see Pl.'s Ex. 16 at 10016. According to this baseline test, the plaintiff was experiencing 8 out of 22 concussion-associated symptoms at that time, including mild pressure in her head and neck pain; moderate feels of being "slowed down" and "not right[;]" mild difficulties in remembering; severe fatigue; moderate drowsiness; and mild nervousness and anxiety. Pl.'s Ex. 17 at 11000. The severity of the symptoms was scored at 21 out of 132, but the plaintiff noted that the symptoms did not worsen with physical or mental activity. See id. In the cognitive assessment portion of the SCAT2 test, the plaintiff received a score of 5 out of 5 in orientation, 15 out of 15 in immediate memory, 4 out of 5 in concentration, and 2 out of 5 in delayed recall. See id. at 11001–02. The plaintiff scored 23 out of 30 in regards to her balance and 1 out of 1 as to coordination. See id. at 11002.

On October 4, 2011, at 10:30 a.m., the plaintiff took another SCAT2 test. See Pl.'s Ex. 2 at 11004–07. At the top of this test, Earls wrote a note, stating "Richmond dizziness after getting shoulder to head. Whole week after felt fine. B[oston]C[ollege] game when symptoms began again." Id. at 11004. The test reflects that the plaintiff reported 17 symptoms associated with concussions, including moderate pressure in her head; mild dizziness, blurred vision, balance problems, sensitivity to noise, and feelings of being slowed down; moderate feelings of being "in a fog" or not right; severe difficulty in concentration; moderate difficulty in remembering; moderate fatigue, confusion, drowsiness, and increased emotions; and mild irritability, sadness, and anxiety. See id. The plaintiff reported on the test that these symptoms increased with physical or mental activity and had a severity rating of 45 out of 132. See id. In the cognitive

assessment portion of the SCAT2 test, the plaintiff received a score of 5 out of 5 in regards to her orientation, 14 out of 15 in immediate memory, 5 out of 5 in concentration, and 4 out of 5 in delayed recall. See id. at 11005. The plaintiff scored 27 out of 30 in regards to her balance, and 1 out of 1 as to her coordination. See id. at 11006. The test also noted that riding a bike was "ok" but that "lifting [with] jerk felt dizzy." Id. at 11007.

On October 5, 2011, at 6:00 a.m., the plaintiff took an additional SCAT2 test. See Pl.'s Ex. 17 at 11008–11; Sept. 13, 2021 Tr. at 416:15–18, 494:8–15. The plaintiff reported 16 out of 22 concussion-related symptoms, including mild pressure in her head, dizziness, blurred vision, sensitivity to noise, feeling slowed down, feeling "in a fog[,]" feeling not right, difficulty concentrating, difficulty remembering, fatigue, confusion, drowsiness, increased emotion, irritability, sadness, and anxiety, which increased with physical or mental activity. See Pl.'s Ex. 17 at 11008. However, the plaintiff's cognitive assessment, balance, and coordination results are not visible on the copy of the test provided to the Court. See id. at 11008–10.

That same day, at 11:00 a.m., the plaintiff took another SCAT2 test. See id. at 11012–15. On this test, the plaintiff reported 19 out of 22 concussion-related symptoms, including mild headache; moderate pressure in her head; mild dizziness, blurred vision, and balance problems; moderate sensitivity to light; mild sensitivity to noise and feeling slowed down; moderate feelings of being in a fog; mild feelings of being not right; moderate difficulty concentrating; mild difficulty remembering, fatigue, and confusion; moderate drowsiness; and mild increase in emotions, irritability, sadness, and anxiety. See id. at 11012. The plaintiff reported that these symptoms increased with physical or mental activity and had a severity rating of 40 out of 132. See id. On the cognitive assessment portion of the test, the plaintiff scored 5 out of 5 regarding her orientation, 15 out of 15 in immediate memory, 5 out of 5 in concentration, and 3 out of 5 in

delayed recall. See id. at 11013–14. The plaintiff scored 26 out of 30 in regards to her balance and 1 out of 1 as to her coordination. See id. at 11014.

Based on the testimony of the plaintiff, Earls, and Dr. Vollmar, as well as the plaintiff's SCAT2 test results and the expert testimony of Dr. Cantu and Dr. Margo, which is discussed infra, see infra Sections I.M.1–2, the Court finds that, by the time that the plaintiff took the first SCAT2 test administered by Earls on October 4, 2011, she had suffered a concussion and was experiencing concussion-related symptoms.

C. The Plaintiff's Appointments with Dr. Williams

Prior to the plaintiff's October 5, 2011 appointment with Dr. Williams, Earls informed Dr. Williams that she wanted him to evaluate the plaintiff for a concussion. See Sept. 13, 2021 Tr. at 491:20–24. Earls's and Dr. Williams's testimony differed as to whether Earls informed Dr. Williams that the plaintiff may have been hit in the head. According to Earls, she "shar[ed with Dr. Williams] that [the plaintiff] may have been hit by a girls' shoulder during a game[,]" id. at 416:6–8, however, according to Dr. Williams, "Earls said that [the plaintiff] was complaining of some dizziness, headaches, some pressure in her head, but that [the plaintiff did] not remember taking any kind of shot to the head[,]" id. at 495:18–20. Earls also testified that she provided Dr. Williams with the plaintiff's "one[-]page history [form]" and "three" "SCAT[2] forms[.]" Id. at 416:15–18. However, Dr. Williams testified that he only recalled receiving the plaintiff's October 5, 2011 11:00 a.m. SCAT2 test result and did not recall reviewing either the October 4, 2011 or October 5, 2011 6:00 a.m. SCAT2 test results. See id. at 495:1–15, 523:10–16. Dr. Williams stated that he did not ask Earls whether the plaintiff had taken any other SCAT2 tests aside from the October 5, 2011 11:00 a.m. test "because [Earls] should tell [him] whether they've done one or not." Id. at 495:8–9. In any event, Dr. Williams testified that he

"was only focused on the one at 11 o'clock" on October 5, 2011, "because that was the one that was done at the time the day I saw her." Id. at 523:14–16.

According to the plaintiff, during the appointment, she told Dr. Williams "everything that [she had] told [Earls,]" including "everything that was in the email" that she had sent Earls on October 3, 2011. Sept. 9, 2021 Tr. at 52:8–14. Dr. Williams testified that he asked the plaintiff "the same question multiple different ways to try and get a mechanism[4] or time frame when her symptoms started[,]" but the plaintiff "could not give [him] one." Sept. 13, 2021 Tr. at 492:1–3. On the Physician's Exam Report for the plaintiff's October 5, 2011 appointment with Dr. Williams, see Pl.'s Ex. 3 at 10018, Earls wrote, "Athlete complains of extreme fatigue, lack of concentration, dizziness, unable to focus on ball and games, pressure in head, does not recall a mechanism[,]" id.; see also Sept. 13, 2021 Tr. at 436:3–9 (testimony by Earls confirming that she wrote the note on October 5, 2011). However, Earls testified that the plaintiff "didn't recall [the shoulder to the head in the Richmond game] being a significant mechanism at the time[,]" Sept. 13, 2021 Tr. at 436:17–18, and so Earls understood her note to mean that the plaintiff did not precisely recall what had happened, see id. at 436:19–437:2.

Dr. Williams reviewed the October 5, 2011 11:00 a.m. SCAT2 test results and compared the results with the plaintiff's baseline SCAT2 test result, concluding that the plaintiff was "dealing with an illness compared to her baseline[.]" Id. at 501:16–17. However, the plaintiff's "overall score was at her baseline, actually slightly improved from baseline minus the symptom score" and, therefore, the SCAT2 result led Dr. Williams to conclude that the plaintiff was not suffering from a concussion because "she was neurologically intact" and "had no mechanism."

[4] A "mechanism" in regards to a concussion is "the blow that caused the concussion symptom" or symptoms, Sept. 10, 2021 Tr. at 222:13–25, such as a "fall or [a] stick hitting the head[,] "people colliding[,]" "heads collid[ing,]" or "other body parts like a shoulder collid[ing] with the head[,]" id. at 246:5–10.

Id. at 502:22–503:6. Instead, Dr. Williams considered whether the plaintiff had "ethmoid sinusitis[,]" "migraines[,]" "endemia[,]" or a "thyroid issue." Id. at 503:3–4.

After tapping on the plaintiff's frontal sinuses and determining that her sinuses were inflamed, Dr. Williams treated the plaintiff for sinusitis. Id. at 503:17–21, 504:25–505:1. He testified that "a concussion [ ] would[ ]n[o]t have th[e] kind of reflexive response" to his tapping that the plaintiff exhibited, which indicated that she had "inflamed sinusitis." Id. at 503:17–24. Dr. Williams documented that the plaintiff had a "headache located in the middle of [her] head and frontal sinus region[,] dizziness, photophobia and phonophobia, concentration issues[,] and fatigue[,]" id. at 499:15–19; see Def.'s Ex. 12A, but concluded that he "d[id] not believe [that the plaintiff had experienced a] concussion due to [not being able to identify a mechanism that would have caused a concussion,]" Pl.'s Ex. 3 at 10018. Dr. Williams further testified that he deemed the lack of a known mechanism significant "[b]ecause every athlete [he had] ever seen with a concussion c[ould] narrow it down to a mechanism" and "down to a very almost narrow window of time when they were fine and when they weren't fine." Sept. 13, 2021 Tr. at 500:8–13. Dr. Williams "gave [the plaintiff] Augmentin, which is an antibiotic . . . take[n] twice a day for ten days[,]" and advised the plaintiff to "stay out of practice and games until that Friday[,]" October 7, 2011, id. at 505:9–11, but he did not place the plaintiff into a concussion management protocol, see Pl.'s Ex. 3.

Dr. Williams did not reevaluate the plaintiff prior to her returning to participate in field hockey. See Sept. 13, 2021 Tr. at 505:12–14. Instead, he testified, he "left that up to" Earls with the instruction that, if the plaintiff's "symptoms improved[, then] she was allowed to play[,]" id. at 505:14–15. Following her October 5, 2011 appointment with Dr. Williams, the plaintiff continued to play field hockey, including in an October 8, 2011 game against Holy Cross. See

Sept. 9, 2021 Tr. at 55:10–12; see also Pl.'s Ex. 3 at 10032 (including a notation by Earls that the plaintiff "played in game at Holy Cross, although [she] did not start"); Pl.'s Ex. 44 at 23000 (a notation by the plaintiff on the timeline she compiled that she had "warmed up/playing 15 minutes of each half"). The plaintiff recorded that, during the Holy Cross game, she "felt very sick, dizzy, [and] tired[;] had vision problems[;] and felt awful." Pl.'s Ex. 44 at 23000. According to the plaintiff, she understood that she was required to keep playing in the games because she had not been diagnosed with a concussion. See Sept. 9, 2021 Tr. at 57:18–19.

On October 12, 2011, the plaintiff saw Dr. Williams for a follow-up appointment. See id. at 56:20–57:2. According to Dr. Williams, during that appointment, the plaintiff "complained of dizziness and difficulty seeing upon onset of activity[;]" worsening symptoms "throughout the day[;]" "headache[;] and [ ] difficulty concentrating[,]" however she had "no fevers, chills, nause[a], [or] vomiting." Sept. 13, 2021 Tr. at 506:13–18. Dr. Williams reviewed the plaintiff's laboratory results with her, which [he concluded] were normal, and diagnosed her with ethmoid sinusitis." Id. at 507:2–3. Dr. Williams "advised [the plaintiff] to finish off the antibiotics and to take the next couple of days off[,]" and instructed her that, "if she felt the need for other medications . . . , [he] would work on referrals and other studies." Id. at 507:4–7. Dr. Williams also said that he would "see [the plaintiff] prior to the game [on Saturday, October 15, 2011,] to see if she[wa]s able to play[,]" id. at 507:9–10, however, despite making this commitment, Dr. Williams did not meet with the plaintiff prior to the game, see Sept. 9, 2021 Tr. at 59:9–10; Sept. 13, 2021 Tr. at 418:21–25.

The plaintiff chose to "s[i]t out" the game on October 15, 2011, against Colgate University, see Sept. 9, 2021 Tr. at 58:1–7, because she was still feeling fatigued and weak, and having headaches, see id. at 58:16–58:18; see also Pl.'s Ex. 44 at 23000. She also chose not to

participate in the game on October 16, 2011, against the University of Maryland. See Sept. 9, 2021 Tr. at 58:22–25.

According to the plaintiff and her parents, she met briefly with Dr. Williams on October 16, 2011, following the University of Maryland game, and Dr. Williams instructed her to drink more coffee and see a neurologist. See id. at 59:16–25, 143:9, 182:6–7. Dr. Williams testified that he did not recall this meeting. See Sept. 13, 2021 Tr. at 418:21–25.

D. The Remainder of the Field Hockey Season

On the day after the plaintiff saw Dr. Williams at the conclusion of the University of Maryland game, the plaintiff's mother took the plaintiff to the emergency room at Georgetown University Hospital, see Sept. 9, 2021 Tr. at 60:16–18; see also Def.'s Ex. 12C, where her symptoms were recorded as dizziness, lightheadedness, headache, unfocused vision, and feeling like the room is spinning, see Sept. 9, 2021 Tr. at 100:14–101:13. The plaintiff testified that she told the doctors in the emergency room that Dr. Williams had ruled out a concussion. See id. at 100:24–101:1. The plaintiff underwent a blood test, a chest x-ray, a head CT scan, EKGs, and an MRI, all of which were assessed as normal. See id. at 60:16–61:21; Def.'s Ex. 12C; Pl.'s Ex. 19 at 100008–12. She was discharged with a diagnosis of vertigo and instructed to schedule an appointment within three days with an ear, nose, and throat specialist ("ENT"). See Def.'s Ex. 12C; Sept. 9, 2021 Tr. at 104:6–15.

On October 20, 2011, the plaintiff saw Dr. Michael S. Morris, an ENT. See Def.'s Ex. 12D; Sept. 9, 2021 Tr. at 108:2–4. Dr. Morris recorded the plaintiff's symptoms as having a headache and being unable to play, read, or do schoolwork; he diagnosed the plaintiff with "[v]ertigo and disorder, mentation symptoms with school[]work, difficulty vestibular nerve, viral illness is possible." Def.'s Ex. 12D.

Throughout the remainder of the field hockey season, which concluded on November 4, 2011, the plaintiff's symptoms did not improve. See Sept. 9, 2021 Tr. at 62:25–63:12. Despite the plaintiff continuing to experience headaches, dizziness, lack of focus, and issues with her vision, see id., she was not removed from practice or games. See id. at 61:24–25 (stating that the plaintiff participated in practice on October 21, 2011); Pl.'s Ex. 44 at 23000 (stating that the plaintiff "played in [a one-]hour practice" on October 21, 2011); Sept. 9, 2021 Tr. at 62:14–22 (stating that the plaintiff played against Bucknell University on October 22, 2011; Georgetown University on October 23, 2011; Lafayette University on October 29, 2011; and Bucknell University for a second time on November 4, 2011); id. at 62:18–20 (stating that the field hockey season ended after the team lost its final game against Bucknell University in the playoffs); see also Pl.'s Ex. 3 at 10032 (stating that the plaintiff "played in home game vs Bucknell, although [she] did not start[;]" "played in home game vs. Georgetown[;]" "started in game [at] Lafayette[;]" "played in home game vs. Bucknell for Patriot League semifinals"). On October 24, 2011, Earls noted that the plaintiff reported "still feel[ing] kind of weird after playing this weekend." Pl.'s Ex. 3 at 10032. On November 10, 2011, Earls noted that she "texted [the plaintiff] because one of her teammates notified [Earls] that [the plaintiff] left practice because she wasn't feeling well" and that the plaintiff responded, "The same stuff and this time to get better, so I[']m trying not to push myself." Id. On November 14, 2011, Earls noted that she "texted [the plaintiff] to see how [the plaintiff] was feeling" and the plaintiff "replied[,] 'Hey I[']m feeling pretty much the same. We decided I[']m not practicing this week tho[ugh]." Id.

E. The Plaintiff's Concussion Diagnosis

On November 23, 2011, while at home for the Thanksgiving holiday, the plaintiff's mother took her to see her family physician, Dr. Shakhti Kumar. See Sept. 9, 2021 Tr. at 63:16–23; see also Pl.'s Ex. 13 at 7031. On December 26, 2011, Earls noted that, in response to an email from Earls "inquiring on how [the plaintiff's] progression ha[d] gone so far[,]" the plaintiff responded:

> So far since I've been back things have gotten worse for some reason. Sometimes I can barely get out of bed and as soon as I get out of bed all I want is to get back in it.[] I've also been standing up and my vision goes black for a few seconds so I just have to stand there until it comes back. . . . I spent most of Christmas in bed because after we ate breakfast and opened presents, I took a nap and woke up with a pounding headache and stayed in bed until around 4[:00 p.m.] Jenna, I'm really nervous at this point. I thought by now that I would be better and I'm not and I think I'm getting worse. I just don't know what to do anymore. I feel so weak and I'm afraid that I will never regain my strength back.

Pl.'s Ex. 3 at 10032; Pl.'s Ex. 18 at 12001–02. On January 4, 2012, the plaintiff had a follow-up appointment with Dr. Kumar, see Pl.'s Ex. 44 at 23001, who referred the plaintiff to a neurologist, Dr. Puneet Singh, see id.; Pl.'s Ex. 13 at 7034–35.

On January 6, 2012, Earls noted that the plaintiff had reported via email the following:

> So I have been feeling a little better, able to do some things like yoga and walking on the treadmill. I went again to my doctor and an eye doctor[[5]] and my doctor recommended going to a neurologist. We set up an appointment for Monday so I'll let you know what happens with that. She also put me on Melatonin because she wants to regulate my sleeping. I'm just kind of worried about what all this means for me in the Spring. Like, I'm not even jogging right now and I don't know if I'll be able to do any of the workouts [Jennings] has planned for us at least in the beginning. I don't want to sit out anymore but I want to get better.

Pl.'s Ex. 3 at 10031; Pl.'s Ex. 18 at 12001.

[5] On January 5, 2012, the plaintiff underwent an eye exam and visual field test at Quarryville Eye Care. See Pl.'s Ex. 44 at 23001.

On January 9, 2012, the plaintiff saw Dr. Singh, who determined that potential diagnoses included "post-concussive syndrome though no clear history of significant head injury[,]" "mononucleosis[,]" "meningitis[,]" and "Lyme disease[.]" Sept. 9, 2021 Tr. at 116:23–117:4; see Pl.'s Ex. 13 at 7034–35; Def.'s Ex. 12F. On January 9, 2011, Earls contacted the plaintiff regarding her neurologist appointment and noted that the plaintiff said, "I have to get [a L]yme[disease] blood test, they're doing a test on my brainwaves and I have to get a lumbar puncture test[,] which is a spinal tap. I[']m getting the tests done on Friday." Pl.'s Ex. 3 at 10031. Earls also noted that the plaintiff sent an email to her, as well as Jennings and Sarah Krumbolz Thorn, the associate head coach of the American field hockey team, stating:

> I wanted to update you on my health and doctor visits I've had this break so far:
>
> I've been to my primary doctor[s], Dr. Kumar and Dr. Fennemore, three times. They told me that the Epstein-Barr levels have gone down again in my blood, so that's good! My symptoms, however, are not really subsiding, so they are worried about that. I've been trying to do yoga and the walking [Earls] gave me to do and still am feeling dizzy after. In the beginning of this break, I felt really bad to the point of not really being able to get out of bed and getting headaches when I got up. I'm starting to get better with this, but Dr. Kumar wanted to try to regulate my sleeping so she put me on Melatonin, which is a natural sleep aid. This hasn't really done anything for me yet, but I'm still taking it. As far as things I'm taking, I'm only taking a daily vitamin, [the] B[-]12, and the Melatonin.
>
> Besides the visits with my primary doctors, I went to an eye doctor and got a full eye exam and visual field test. The visual field test came back basically normal he said, but he feel[s] that my eyes have to work a lot to stay balanced and he also said that I have an astigmatism and wants me to get reading glasses to help relax my eyes more. I should be getting them within a week or two.
>
> Dr. Kumar also referred me to a neurologist and I had my visit today with Dr. Singh (Neurologist). I had called Georgetown Hospital to get my MRI cd for her to look at last week as well. M[y] visit with her was very long and we talked for a while and basically she wants me to get a few more tests before she can really help me. She is having me get three tests. A Lyme Blood Test. (I got the blood drawn today.) An EEG, which is a test that will monitor my brain waves, and a lumbar puncture test, which is a spinal tap. I'm getting the EEG some time this week as soon as possible and I'm scheduled to get the spinal tap on Friday. She'll have the results from the Lyme test [on] Friday.

Id.; Pl.'s Ex. 18 at 12004.

On January 13, 2012, the plaintiff underwent the EEG and three spinal taps. See Pl.'s Ex. 44 at 23001. She testified that "it was very, very scary[.]" Sept. 9, 2021 Tr. at 65:21. Earls noted that the plaintiff had reported that she "just had three spinal taps done[,]" but that "barely any fluid came out[,]" so her doctor decided to do "a test to see if it is actually a leak that is causing the low pressure in [her] spinal fluid." Pl.'s Ex. 16 at 10031. From January 18, 2012, to January 20, 2012, the plaintiff underwent treatment at Lancaster General Hospital, having "pledgets[[6]] inserted [into her] nose, radioactive isotopes injected into [her] spine, scans of [her] spine, [and an] MRI." Pl.'s Ex. 44 at 23001; see Pl.'s Ex. 12 at 6001–02 (noting that the plaintiff underwent a "radionuclide injection" and "[p]ledgets were placed in [her] nasopharynx"); Pl.'s Ex. 13 at 7037.

On January 19, 2012, Earls noted that the plaintiff had reported that "all the scans and [the] MRI couldn[']t find [the] location of [the] leak" because her cerebral-spinal fluid "pressure is so low in [her] spine that the isotopes didn[']t really travel[,]" and that she was "having a blood patch" to address the suspected leak. Pl.'s Ex. 16 at 10031. On January 25, 2022, Earls noted that she had received an email from the plaintiff, stating that she had told her doctor that she "was still having headaches and some back pain," and the doctor had "asked [her] to try to be on bed rest to see if the blood patch just needs a little more time." Id.

On February 2, 2012, the plaintiff underwent a cervical spinal tap, see Pl.'s Ex. 44 at 23001, and a CT of her thoracic spine and cervical spine, see Pl.'s Ex. 13 at 7038–40. On

[6] A pledget is "a compress or pad used to apply medication to or absorb discharges (as from a wound)[.]" Pledget, Merriam-Webster Dictionary Online, https://www.merriam-webster.com/dictionary/pledget (last visited July 28, 2022).

February 3, 2012, the plaintiff again saw Dr. Singh for "fatigue, dizziness, and headache[,]" Sept. 9, 2021 Tr. at 117:10–14; Def.'s Ex. 12G, and Dr. Singh ordered diagnostic testing, see Sept. 9, 2021 Tr. at 117:21–22. Following the testing, Dr. Singh diagnosed the plaintiff with post-concussive syndrome. See id. at 117:15–16.

F. The Spring 2012 Semester

The plaintiff testified that her return to school for the Spring 2012 semester was "[h]orrible" because she was "expected to be the person [she] was last year when [she] didn't have all these problems[,]" and that she "felt [ ] hopeless." Id. at 66:5–10. The plaintiff further testified that she "was having so much trouble with [her] schoolwork because [she] couldn't concentrate and reading was so hard[,]" requiring breaks every 30 minutes, however, she was told, "well, you're not diagnosed with a concussion, we can't do anything."[7] Id. at 67:1–4; 67:7–8. The plaintiff also testified that she "felt [ ] overwhelmed[.]" Id. at 68:8.

On February 10, 2012, the plaintiff sent an email to Jennings, Earls, Thorn, Melissa Katz,[8] and her teammates, stating that she was "still having headaches[;] dizziness[;]" "fatigue[;]" "memory loss[;]" "loss of concentration and analytical skills[;]" "problem-solving skills[;]" and "difficult[ies]" "interacting socially[;]" and that "more psychological symptoms are coming into play for [her,]" including "a very high rate of anxiety[,]" "mood swings[,] and irritability[.]" Pl.'s Ex. 18 at 12006–07.

On February 29, 2012, the plaintiff had a follow-up appointment with Dr. Williams, during which Dr. Williams noted that he had reviewed information from the plaintiff's neurologist diagnosing the plaintiff with post-concussive syndrome and that the plaintiff reported

[7] The plaintiff did not specify who said that if she was "not diagnosed with a concussion, [they] c[ould]n't do anything." Sept. 9, 2021 Tr. at 67:7–8. See generally id. at 66:18–67:11.

[8] The identity of Melissa Katz and what, if any, association she had with this case is unclear from the record.

ongoing headaches on a daily basis, although her symptoms had improved over the last two-to-three weeks. See Pl.'s Ex. 16 at 10022. Dr. Williams informed the plaintiff that she should not engage in any physical activity until she had no symptoms for at least 48 hours. See id.

On March 19, 2012, the plaintiff started treatment with Dr. Mindy Bixby, a neurologist at MedStar National Rehabilitation Hospital here in the District of Columbia, for post-concussive syndrome. See Pl.'s Ex. 9 at 3003. During her first appointment with Dr. Bixby, the plaintiff reported symptoms of headaches, photophobia, visual changes, balance problems, dizziness, cognitive difficulties, and sleep disturbances. See id. The plaintiff was prescribed Propranolol as a preventative medication for her headaches, as well as Zoloft for anxiety and depression, and was referred for neuropsychological testing. See id. at 3003–05. On March 28, 2012, the plaintiff had a follow-up appointment with Dr. Williams, who noted that the plaintiff reported ongoing visual problems that were exacerbated by activity and advised the plaintiff that the policy was to preclude athletes from exercising while symptomatic. See Pl.'s Ex. 16 at 10023. On March 30, 2012, the plaintiff began receiving psychotherapy and biofeedback treatment at the Brain Wellness and Biofeedback Center of Washington. See Pl.'s Ex. 10.

During the Spring 2012 semester, the plaintiff also participated in a one-week "alternative spring break" trip to Moldova, for which she had applied before being injured. See Sept. 9, 2021 Tr. at 78:1–2; Pl.'s Ex. 10 at 3000 (notes from the plaintiff's March 30, 2012 biofeedback appointment with Dr. Barbara Blitzer including a timeline demonstrating that the plaintiff's Moldova trip occurred between December 2011 and the date of the appointment). The plaintiff was cleared to take the trip by her treating physicians, see Sept. 9, 2021 Tr. at 78:21–23, and she informed the "fa[c]ulty professor" on the trip, who was also the plaintiff's professor at American University, "all about [her] situation[,]" id. at 78:13–15. Although the trip was

intended to "be for a credit[,]" id. at 79:7–8, the plaintiff was unable to complete the paper that was required to receive the credit, and thus she "didn't get the credit[,]" id. at 79:8–10.

On April 4, 2012, the plaintiff again saw Dr. Bixby, who noted that the plaintiff's "[h]eadache[s] improved in frequency and duration since starting [P]ropranolol[,]" but that she was still experiencing "[i]ntermittent headaches . . . that [were] sharp in character" and "last[ed] [ ] approximately 20 minutes, occurring during class." Pl.'s Ex. 9 at 3007. According to Dr. Bizby's notes, the plaintiff reported that she was "currently attending classes[,] but no homework or testing at this time[.]" Id.

G. The Plaintiff's Leave of Absence from American University

The plaintiff testified that she "stayed in school until [she] was told by [Dr. Singh] what was going on and how dangerous it was, and [then she] immediately stopped[,]" Sept. 9, 2021 Tr. at 68:21–25, and took "temporary leave[,]" id. at 69:4–5, from her studies at American University. Consequently, for the Spring 2012 semester, the plaintiff received an F in all of her classes, which was ultimately changed to either an "I" for Incomplete or a "W" for withdrawal after the plaintiff advocated for the grade corrections. See id. at 69:10–70:1; Pl.'s Ex. 6 (the plaintiff's academic transcript from American University). Following the Spring 2012 semester, the plaintiff did not return to continue her education for a year and a half. See Sept. 9, 2012 Tr. at 73:17–18. While the plaintiff was on temporary leave, she provided voluntary language education to Nepalese refugees in Lancaster, see id. at 76:18–21, 77:3–22, while residing with her parents, see id. at 73:17–18. The plaintiff testified that she spent "an hour or so here and there just teaching adult refugees things like the ABC's and, "Hi, how are you[,]" i.e., "just the very basics." Id. at 77:20–22.

On May 5, 2012, during a psychotherapy session, the plaintiff reported that her headache pain "completely interfere[d]" with her day-to-day general activities and the normal duties of her job, and significantly interfered with her ability to engage in household chores, participate in normal recreational and social activities, maintain social relationships, obtain adequate restful sleep, and maintain a normal good mood. See Pl.'s Ex. 10 at 40262. The plaintiff also reported that, over the previous month, she was dissatisfied with her life in general and that she felt significantly sad/depressed, anxious/nervous, and irritable. See id.

From May 3, 2012, to June 22, 2012, see Pl.'s Ex. 44 at 23002–04, the plaintiff underwent a neuropsychological examination conducted by Dr. Jon Bentz, Ph.D., during which she reported

> pressure in the head; dizziness; fatigue; phonophobia and [ ] sensitivity to the sun that increase[d a] pressured feeling in the head; occasional problems with balance; visual disturbance when reading[, e.g.,] difficulty with tracking and the words 'jumping'; cognitive symptoms of feeling foggy with her thinking, difficulty with word retrieval, mental slowing and difficulty thinking critically; increased sense of sadness, anxiety and irritability; and lack of restful, restorative sleep.

Pl.'s Ex. 12 at 6094; Pl.'s Ex. 4 at 6094–98. Dr. Bentz recommended that the plaintiff not return to school until her condition improved and that she "pace [her]self in all activities (social, physical, [and] cognitive)." Pl.'s Ex. 12 at 6097. On July 5, 2012, the plaintiff transferred to a new team of primary care physicians, Dr. William R. Vollmar II and Dr. Zachary A. Geidel, after she transitioned out of pediatric care with Dr. Kumar. See Pl.'s Ex. 20, at 110002; Sept. 9, 2012 Tr. at 121:24–122:23. Over the summer of 2012, the plaintiff attempted to work, but quit her job after two months because she was unable to handle the physical demands of the job. See Pl.'s Ex. 20 at 110103.

From August 14, 2012, through September 14, 2012, the plaintiff saw Dr. John Vakkas for treatment of temporomandibular joint ("TMJ") issues. See Pl.'s Ex. 11 at 5000. As part of

this treatment, the plaintiff underwent a closed-bite MRI. See id. On September 28, 2012, the plaintiff saw Dr. Geidel for a follow-up appointment regarding her post-concussive syndrome. See Pl.'s Ex. 20 at 110016. During that appointment, Dr. Geidel noted that the plaintiff was experiencing headaches, dizziness, vision difficulty, sleep issues, and concentration issues, although her "[m]ood had improved on [Z]oloft." Id. On November 7, 2012, the plaintiff again saw Dr. Geidel, who noted that she reported malaise, headaches, photophobia, nausea, dizziness, and sleep disturbances. See id. at 110019–20. Dr. Geidel instructed the plaintiff to undergo cognitive rest and to avoid "any significant stimulation and physical activity." Id. at 110021. He also took the plaintiff off of Zoloft, as she no longer reported any anxiety or depression. See id. On December 27, 2012, the plaintiff saw Dr. Vollmar for a follow-up appointment, who noted that the plaintiff reported malaise, headache, photophobia, nausea, dizziness, and sleep disturbances. See id. at 110023. Dr. Vollmar also noted that the plaintiff "had mild difficulty with short[-]term recall, remembering only [two] out of the [three] words [she was] instructed to remember." Id. at 110024. After a discussion with Dr. Vollmar during the December 27, 2012 appointment, see id., the plaintiff began taking Adderall, see Pl.'s Ex. 4 at 9012. On January 10, 2013, and January 24, 2013, the plaintiff again saw Dr. Vollmar, who noted that the plaintiff was still experiencing headaches, occasional dizziness, concentration issues, and difficulty falling asleep, although her focus and concentration had improved since being prescribed Adderall. See Pl.'s Ex. 20 at 110025. The plaintiff also reported experiencing increased anxiety since she sustained the concussion. See id. On February 14, 2013, Dr. Vollmar noted that the plaintiff still experienced persistent dizziness, headaches, anxiety, and visual disturbances, but that there had been significant improvements in her symptoms and that she had started jogging over the past couple of days without experiencing headaches. See id. at 110030.

H. The Plaintiff's April 2013 Concussion

On April 18, 2013, the plaintiff saw Dr. Vollmar for a further follow-up visit, during which Dr. Vollmar noted that the plaintiff had reported hitting her head on the ground on April 13, 2013,[9] and being dazed, dizzy, and lethargic. See id. at 110031. During the appointment, the plaintiff reported experiencing headaches, difficulty tracking moving objects, and "some dizziness and visual loss when she stands from sitting or supine." Id. Dr. Vollmar assessed that the plaintiff had experienced a concussion. See id. at 110032; Sept. 14, 2021 Tr. at 803:9–11. Based on Dr. Vollmar's testimony and treatment notes, the Court finds that the plaintiff suffered a concussion on April 13, 2013.

I. The Plaintiff's Return to American University

During the April 18, 2013 appointment, Dr. Vollmar discussed with the plaintiff her returning to college and noted that the plaintiff stated that "she would like to return under scholarship[,] but [that her scholarship was] conditional on her taking a manager's position." Pl.'s Ex. 20 at 110033. Dr. Vollmar advised her that she should "return with a partial course work[]load and no added stress from a manager's position[,]" so as not to "set back her progress in resol[ving her] concussion symptoms[.]" Id. Ultimately, when the plaintiff returned in school, she returned "only part-time . . . because of the symptoms and [because her] doctor felt that it was just the way we should do this." Sept. 9, 2021 Tr. at 74:11–13. She initially took two classes during the summer of 2014, before returning to a full courseload at the end of 2014. See id. at 94:2–14. She also "registered in the disabilities office[at American University], and they" provided her with accommodations, including additional time on exams and assignments, and

[9] On April 18, 2013, Dr. Vollmar noted, "Hit back of head on [S]at on ground[.]" Pl.'s Ex. 20, at 110031. The Court takes judicial notice of the fact that April 18, 2013, was a Thursday and, thus, the prior Saturday would have been April 13, 2013. See Brown v. Piper, 91 U.S. 37, 42 (1875) ("Among the things of which judicial notice is taken are . . . the coincidences of the days of the week with those of the month[.]").

access to class notes from a fellow student. See id. at 73:24–74:8. In the spring of 2013, the plaintiff traveled to Germany with her then-girlfriend. See id. at 93:17–21.

On May 16, 2013; July 18, 2013; and August 15, 2013, the plaintiff saw Dr. Vollmar again, reporting mild headaches every two-to-three days, sleeping problems, and visual tracking issues. See Pl.'s Ex. 20 at 110037–45. On October 26, 2013, the plaintiff saw a physician's assistant, Jamie L. Hamid, at Dr. Vollmar's and Dr. Greidel's medical office, reporting that she was doing well following her return to school; the medications Adderall and Sertraline had improved her concentration and headaches, although she still experienced mild headaches every two-to-three days; and she was having difficulty sleeping. See id. at 110046.

On December 16, 2013, the plaintiff underwent a second neuropsychological examination, which was conducted by Dara S. Fisher, Psy.D. See Pl.'s Ex. 4 at 9010–17. During the examination, the plaintiff reported that

> overall, her symptoms have improved since the acute phase following the concussion. She has noticed improvement in her ability to read and comprehend information. She finds that reading becomes difficult after 30 minutes, as the lines become "wavy." While it is harder to focus and concentrate, she finds that she is able to at times, but it is effortful. She has found Adderall to be somewhat effective. She does have a tendency to lose her train of thought and think less clearly[] but feels she has gotten "used to it." She continues to experience word-finding difficulties, finding that she is "grasping" for words, with no improvement. [She] reports that while her headaches have declined in frequency, she continues to feel pressure in her head and finds that it is extremely painful during her menstrual period. She continues to experience significant fatigue with no improvement. She becomes over-stimulated in noisy, bustling environments such as big stores and is sensitive to loud noise, but not light. [She] also continues to experience jaw pain, which began [six] months after the injury. She was diagnosed with TMJ and currently wears a mouth guard when she sleeps.

Id. at 9010. Dr. Fisher determined that the

> evaluation revealed intact functioning when compared to others her age with regard to multiple domains including attention, language, memory, and visuospatial/constructional abilities[; h]owever, consistent with previous testing, she demonstrated mild impairments in several areas that may represent a mild but

> noticeable decline from her level of functioning prior to the concussion, which was likely in the high average range.

Id. at 9015. Dr. Fisher elaborated that the plaintiff "demonstrated slightly slower processing speed and inefficient learning strategies with lower[-]than[-]expected semantic, meaningful organization of material." Id. Dr. Fisher noted that the plaintiff's "performance did not significantly improve since the previous evaluation conducted in May 2012." Id. Dr. Fisher further noted that the plaintiff "is continuing to experience significant fatigue and sleep disturbance" and "[s]he should continue to monitor her energy level, be flexible, and allow herself breaks as needed[,]" which "may include giving herself permission to nap, allowing herself to take breaks and walk around during lecture[s], and being sensitive to levels of activity that results in over-exertion." Id. Moreover, according to Dr. Fisher, the plaintiff's "[c]ognitive symptoms[,] such as slower information processing and depth of processing[,] continue to be in the low average range[, but] while this is a personal decline, they should not, from a neuropsychological perspective, interfere with [her] reported aspirations regarding educational and career decisions." Id. at 9016.

On May 23, 2014, the plaintiff was instructed by a physician's assistant at Dr. Vollmar's and Dr. Giedel's medical office, Elizabeth L. Messick, to begin to wean herself off of taking Adderall. See Pl.'s Ex. 20 at 110059. When the plaintiff saw Dr. Vollmar again on August 22, 2014, he noted that she "has been doing well since" lowering her dosage of Adderall "for the past month" and is "able to focus well without the medication." Id. at 110066.1. He further noted that the plaintiff reported that she "still gets headaches almost daily[,] but she barely notices them anymore" and they "have improved since she ha[d] become more physically active with activities like yoga and biking." Id. Dr. Vollmar also noted that the plaintiff reported

getting "dizzy with fast movements[,] but not as severely as it used to be." Id. Dr. Vollmar further reduced the plaintiff's Adderall dosage. See id. at 110066.3.

On March 11, 2015, the plaintiff reported to Dr. Vollmar that she was experiencing significant fatigue, "trouble focusing that was initially present after the concussion and had initially been improving[,]" short-term memory issues, headaches that lasted "approximately three[-]to[-]four days[,]" and nausea. Id. at 110066.6.

J. The Plaintiff's Post-Graduation Work in Nepal

In Spring 2015, the plaintiff graduated from American University, two years after she should have graduated. See Sept. 9, 2021 Tr. at 74:16–20. The plaintiff earned an award for her "work with [ ] refugees" and for the best oral presentation for undergraduate research. See id. at 94:15–20. After the plaintiff graduated, she traveled to Nepal with Nyingthop, a Nepalese nonprofit organization. See id. at 80:16–19, 81:18–24; Pl.'s Ex 20 at 110066.12 (treatment notes from Dr. Vollmar recorded on September 8, 2015, noting that the plaintiff "[wa]s going to Nepal for 5 months"). The plaintiff worked on Nyingthop's "longtime memory project," Sept. 9, 2021 Tr. at 82:12–13, which created an archive of the losses due to the April 2015 earthquake in Nepal that caused an avalanche, leading to the destruction of a village, see id. at 82:14–21. During the project, the plaintiff "worked with Austin Lord[,]" who was "finishing his Ph.D at Cornell [University]." Id. at 82:23–24. The plaintiff testified that Lord "kn[e]w[] everything about [her] head injury" and was "always there to make sure it's okay." Id. at 83:1–2.

At trial, the plaintiff testified that she still "spend[s] a substantial amount of time in Nepal" and that, for her work, she receives "something like a stipend where, you know, you can eat and live, but you don't go to restaurants everyday" and cannot "save any money[.]" Id. at 84:11–16.

K. The Diagnosis of Moderate Traumatic Brain Injury

After returning from Nepal, the plaintiff saw Dr. Vollmar again for an appointment on June 1, 2016, during which she reported difficulties in concentration and depression, and stated that she wanted to discuss with Dr. Vollmar resuming her medication. See Pl.'s Ex. 20 at 110066.15. Following this appointment, Dr. Vollmar noted that his diagnosis had changed from post-concussive syndrome to a moderate traumatic brain injury, see id. at 110066.16, which he described as "permanent defects based on head injury[,]" Sept. 10, 2021 Tr. at 374:14–15. In his deposition testimony, Dr. Vollmar noted that he "based [his diagnosis of a moderate traumatic brain injury] on the fact that [the plaintiff] ha[d] continuing symptoms and deficits from a cognitive standpoint in focus and headaches that ha[d] lasted longer than a year[, s]o [he] ha[d] no reason to believe that they [we]re going to resolve." Id. at 386:17–22. Dr. Vollmar further stated that he "expect[ed the plaintiff] to have deficits indefinitely[,]" which "means permanent[ly]." Id. at 388:6–16. On December 5, 2016, Dr. Vollmar noted that the plaintiff reported headaches; anxiety; and "issues with attention span, word[-]finding, and recall mostly when in stressful situations[;]" but that she was feeling better after stopping her anti-depressant medications two months earlier. Pl.'s Ex. 20 at 110066.28–29. On January 2, 2017, Dr. Vollmar diagnosed the plaintiff with attention deficit disorder ("ADD"). See id. at 110066.40.

L. Testimony Regarding Dr. Williams's Relationship with American University and Dr. Higgins

As noted earlier, while he was treating the plaintiff, Dr. Williams was participating in the Military Primary Care Sports Medicine Fellowship (the "fellowship"), which is operated by the National Capital Consortium ("Consortium"). See Def.'s Ex. 5. In 2011, Colonel Kevin deWeber was the Program Director of the fellowship. See id. at 1. One of the fellowship's placements was at American University, under the supervision of Dr. David Higgins, who

operated the Higgins Practice and served as the physician for the sports teams at American University. See id.

The relationship between Dr. Higgins and the Consortium was governed by three documents: the Memorandum of Understanding Between the Medical Practice of David L. Higgins, M.D. and the National Capital Consortium ("Memorandum of Understanding"); the Letter of Agreement Between the National Capitol Consortium and Dr. David Higgins, American University and Good Counsel High School ("Letter of Agreement"); and the Fellowship Manual. The Memorandum of Understanding was signed by Dr. Higgins and Colonel deWeber, and sets forth, inter alia, the responsibilities of Dr. Higgins and the Higgins Practice, the responsibilities of the Consortium, provisions regarding liability, and points of contact. See generally Def.'s Ex. 1. The Letter of Agreement "describes in more detail the practicum rotation, educational goals and objectives, the scope of the affiliation[between the Consortium and Dr. Higgins], [the] resources available, [the] fellow's duties and responsibilities, the relationship between the fellowship program and the practicum site, supervisory relationships, and procedures for handling problems." Def.'s Ex. 2 at 1. The Fellowship Manual sets forth the educational goals of the fellowship program, the faculty and instructors, the evaluation methods, and the program policies. See Def.'s Ex. 5 at 2.

According to the Memorandum of Understanding, Dr. Williams was under the supervision of Dr. Higgins when he was providing medical treatment during his fellowship. See, e.g., Def.'s Ex. 1 ¶¶ 5, 11, 15, 17–20, 23, 31. However, the Consortium maintained responsibility for several aspects of Dr. Williams's experience at American University, including coordinating assignments and attendance at clinics, conferences, courses, and programs; maintaining personnel records and reports; and ensuring compliance with the rules and

regulations of Dr. Higgins's practice. See id. ¶¶ 25–28, 32. Similarly, the Letter of Agreement and Fellowship Manual reflect that Dr. Higgins and the Consortium shared supervisory responsibilities over Dr. Williams during his fellowship. See Def.'s Ex. 2 at 1–2, 4–6; Def.'s Ex. 5 at 66.

Despite provisions in both the Memorandum of Understanding, the Letter of Agreement, and the Fellowship Manual indicating that Dr. Williams would be supervised by Dr. Higgins directly and, more indirectly, by the Consortium staff, testimony at trial revealed that no one directly supervised Dr. Williams in regards to his treatment of American University student-athletes, such as the plaintiff. See, e.g., Sept. 13, 2021 Tr. at 475:10–14, 564:14–17; Transcript of Bench Trial – Day 4 (Sept. 14, 2021) ("Sept. 14, 2021 Tr.") at 773:6–10, 773:21–25, 775:5–25, ECF No. 182. Moreover, Dr. Williams did not consult regularly with Dr. Higgins about the student-athletes treated by Dr. Williams, and there was no evidence that Dr. Higgins ever reviewed Dr. Williams's work or his treatment of any student-athlete. See Sept. 14, 2021 Tr. at 773:21–25, 775:5–25.

M. Expert Testimony

1. The Plaintiff's Experts

a. Dr. Robert Cantu

Dr. Robert Cantu testified for the plaintiff. See Sept. 10, 2021 Tr. at 204. The Court qualified Dr. Cantu as an expert in the field of neurosurgery, specifically with respect to concussions. See id. at 216:13–24. Dr. Cantu testified that the symptoms associated with a concussion include (1) "cognitive symptoms[,]" e.g., "difficulty with memory, difficulty with concentration, difficulty with focus, [difficulty with] doing cognitive tasks such as learning words or repeating digits correctly[,]" id. at 221:11–14; (2) "physical domain symptoms[,]" e.g., "headache[,]" "neck pain[,]" "sensitivity to light, sensitivity to noise, difficulty with dizziness[,]"

id. at 221:16–19; (3) "vestibular ocular symptoms[,]" e.g., "blurred vision[,]" "double vision[,]" or "difficulty with balance[,]" id. at 221:19–21; (4) "sleep symptoms[,]" e.g., "sleeping more than usual[right after a concussion], but after some period of days or weeks after [a] concussion[,] it's the opposite where you're sleeping less than usual[,]" id. at 221:22–222:1; and (5) "emotional symptoms[,]" e.g., "depression, anxiety, short fuse, impulsive[-]type behavior or emotionality, inappropriate laughing or crying for events where it would not be appropriate[,]" id. at 222:2–6. Dr. Cantu further testified that the standard of care requires that, when treating an individual experiencing the symptoms of a concussion, the doctor must treat the individual as having a concussion, unless he or she is able to definitively eliminate any possibility of a concussion. See id. at 274:22 – 275:5. He stated that awareness of a mechanism is not necessary for the diagnosis of a concussion and that, frequently, a mechanism is unable to be identified, particularly when the onset of symptoms is delayed. See id. at 222:13–25. Accordingly, Dr. Cantu testified that, even if a patient is unable to identify the mechanism of a concussion, he or she should be treated as having a concussion if the doctor cannot rule out a concussion. See id. at 271:1–4. According to Dr. Cantu, treating an individual for a concussion would require that the individual be removed from practice and game participation, and, if appropriate, receive academic accommodations. See id. at 274:11–20.

Dr. Cantu testified that, in light of the plaintiff's symptoms and SCAT2 test results, the standard of care required the diagnosis of a concussion and the plaintiff being removed from practice and game participation until her concussion-related symptoms had ceased. See id. at 229:2–11. Dr. Cantu testified that both the plaintiff's October 4, 2011 and October 5, 2011 11:00 a.m. SCAT2 test results were sufficient to diagnose a concussion. See id. at 227:12–17, 228:6–14. Although Dr. Williams testified that he did not see the October 4, 2011 or October 5,

2011 6:00 a.m. SCAT2 test results, see Sept. 13, 2021 Tr. at 495:1–15, Dr. Cantu stated that the standard of care would require a doctor to review the results of prior testing, including "go[ing] through the medical records that are relevant to the possibility of a concussion[,]" which would include "the SCAT[2 test] that was done on [October 4, 2011,]" and "the two SCAT[2]s on [October 5, 2011.]" Sept. 10, 2021 Tr. at 227:18–228:2.

According to Dr. Cantu, if the plaintiff had been removed from practice and game participation on October 5, 2011, or within approximately one week of her concussion, she would have recovered at least to the level of her baseline SCAT2 test result. See id. at 230:9–12, 260:9–15. He stated that her continued symptoms were due to the failure to diagnose the plaintiff's concussion and remove her from practice and game participation, see id. at 235:5–7, and her symptoms were now permanent, id. at 229:25–230:1, 241:15–16.

b. Dr. Joseph Crouse

Dr. Joseph Crouse testified for the plaintiff. See id. at 280:9–13. The Court permitted Dr. Crouse to testify as an expert in the areas of vocational rehabilitation and economics. See id. at 287:6–9. Dr. Crouse testified that the plaintiff "would have reduced annual earnings and reduced life expectancy as a result of her cognitive functional limitations, and that would translate into an overall loss of earning capacity of $1,037,047 to $1,210,108[,]" depending on whether the plaintiff acquired a Bachelor's or graduate degree. Id. at 289:22–290:14.
Dr. Crouse testified that he used the methodology that was generally used within his field. See id. at 293:13–16. Specifically, he relied upon the United States Census Bureau's American Community Survey ("ACS"), which is "the largest survey that the [United States] does on an annual basis" and is "routinely used" by "disability researchers across the country . . . in order to understand more about the population in the [United States] that has disabilities." Id. at 290:24–

291:7; see id. at 292:2–3 (testimony of Dr. Crouse that the Disabilities Statistics Rehabilitation Research and Training Center for Economic Research on Employment Policies for Persons with Disabilities "uses the [ACS] data" and "there's a wide variety of groups that use that data and come up with disability statistics compendiums"). According to Dr. Crouse, the ACS "is frequently relied on due to the fact that its sample size is so large[,]" and thus, "any sampling errors or any other type of errors that you could think of in a survey research would be nearly eliminated[.]" Id. at 291:14–21.

Dr. Crouse also interviewed the plaintiff and "reviewed [her] medical records, [including the neuropsychological reports and her] academic records[,]" as well as Dr. Cantu's expert report "to understand his opinion regarding prognosis and causation." Id. at 293:4–12; 296:24–297:7. Dr. Crouse also "conducted three different vocational tests[:]" id. at 292:6, "the COPS[Interest Inventory], the Beta-4[,] and the [Wide Range Achievement Test ('WRAT')]," id. at 292:9, which are regularly used by vocational rehabilitation experts, see id. at 292:25–293:3. According to Dr. Crouse, "[t]he Beta-4 is a test of an individual's nonverbal intellectual functioning[,]" which includes "different tests like coding, clerical checking, [and] looking at matrix reasoning[,]" id. at 292:13–16; the WRAT "measures academic achievement[,]" id. at 292:20–21; and the COPS "looks at where an individual's career interests lie[,]" id. at 292:23–24.

Dr. Crouse "determined that [the plaintiff] met the [ACS] definition of an individual that has a non-severe cognitive disability based on her cognitive functional impairments[,]" id. at 294:1–4, which is based on whether "the individual ha[s] difficulty remembering, concentrating[,] or making decisions[,]" id. at 296:7–8. Dr. Crouse then "used data that pertains to non-severe" impairments, i.e., impairments where the individual "does not have problems

going outside the home alone or with dressing or bathing," in order "to eliminate [from his analysis] individuals [who] have the most severe cognitive impairments." Id. at 296:11–15.

From the Beta-4 test, Dr. Crouse determined that the plaintiff "had an average level of nonverbal intellectual functioning[,]" id. at 298:4–5, in the 58th percentile, see id. at 298:17, which demonstrated a decrease in functioning from the plaintiff's results on the Scholastic Aptitude Test, on which "she [ ] scored in the 89th percentile[,]" id. at 298:6–7. On the WRAT, the plaintiff's "scores were similar to someone that had some college education, but no degree[,]" with her performing "well with the spelling section of the test[,]" but "weaker in the math computation[,] . . . word reading[,] and sentence comprehension" components of the test. Id. at 299:7–11. According to Dr. Crouse, the plaintiff's WRAT results were "just another part of the equation that led [him] to determine that [the plaintiff] could be classified as having a non-severe cognitive disability." Id. at 299:14–16. From the COPS test, Dr. Crouse determined that the plaintiff's career interests lay "in the science professional career cluster[,]" and, specifically, in anthropology. Id. at 299:19–23. Based on his assessment of the plaintiff's functional capacity and his application of "the employment data from the" ACS, Dr. Crouse determined that "her limitations [in] memory concentration, organization, multitasking, [and] information processing . . . would impede her future ability to attain[and] retain a position, and it would likely also necessitate that she retire sooner or that her job transitions would be harder[.]" Id. at 300:16–23.

Dr. Crouse also analyzed the plaintiff's "earning capacity and work life expectancy." Id. at 301:3–4. To determine the plaintiff's earning capacity, Dr. Crouse compared a "pre-injury scenario" of "average earnings for females that have a Bachelor's degree and no disability" with a "post-injury scenario" of "earnings for females that have a Bachelor's degree, but have a

non[-]severe cognitive disability." Id. at 301:5–13. To determine her work-life expectancy, Dr. Crouse looked at the ACS data for a pre-injury scenario of "females with a Bachelor's degree and no disability[,]" and a post-injury scenario of "females with a Bachelor's degree [with] a non-severe cognitive disability." Id. at 301:25–302:4.

Before calculating the plaintiff's "year-by-year earning capacity and employment levels[,]" id. at 302:8–9, Dr. Crouse applied the "total offset approach[,]" wherein "growth rate and compensation is offset by [a] discount rate . . . at the present value[,]" id. at 295:4–7, i.e., the "current worth of a future stream of income given a specified discount rate[,]" id. at 294:25–295:1. Dr. Crouse testified that the total offset approach is a reasonable approach within the field of economics because "historical data" demonstrates that "the growth rate in compensation is approximately equal to the risk[-]free rates that a person could receive on a lump sum award[,]" id. at 295:15–17; certain states require its application, see id. at 295:13–14; and "peer[-]reviewed literature in recent years has supported it more and more[,]" id. at 295:21–24. Then, Dr. Crouse generated two tables that reflect his determination of the plaintiff's pre- and post-injury earning capacity and employment levels, see id. at 303:13–19, with one table reflecting the plaintiff's attainment of a Bachelor's degree and the other table based on her attaining a graduate degree, see Pl.'s Exs. 54A, 54B. Specifically, Dr. Crouse testified that the plaintiff "would have reduced annual earnings and reduced life expectancy as a result of her cognitive functional limitations, and that would translate into an overall loss of earning capacity of $1,037,047[, if she would have only obtained a Bachelor's degree,] to $1,210,108[,]" if she would have also obtained a graduate degree. Sept. 10, 2021 Tr. at 289:22–290:14.

2. The Defendant's Expert

a. Dr. Katherine Margo

Dr. Katherine Margo testified for the defendant. See Sept. 13, 2021 Tr. at 565:7–11. Over the plaintiff's objection,[10] the Court recognized Dr. Margo as an expert in the field of family medicine. See id. at 583:17–19, 588:1–2. During the plaintiff's questioning of Dr. Margo regarding her qualifications, Dr. Margo admitted that she may have seen only between twenty and twenty-five patients with suspected concussions during the course of her career and that she did not have any specific qualifications regarding concussions or neurology. See id. at 579–88. Dr. Margo testified that it was "most likely" that the plaintiff suffered a concussion in September 2011, see Sept. 14, 2021 Tr. at 660:6–12, and that the symptoms identified by the plaintiff in her October 3, 2011 email to Earls were consistent with a concussion, among "so many different things[,]" Sept. 13, 2021 Tr. at 618:2–11. She further testified that a hit to the head by a shoulder could be a mechanism that would cause a concussion. See Sept. 14, 2021 Tr. at 650:11–13.

Dr. Margo testified that a doctor need only treat a patient as if they have a concussion "if [the doctor] know[s] that there's a mechanism of injury[,]" and, "if [the doctor] do[es]n't think there's an injury then concussion really isn't on [the list of] differential" diagnoses. Id. at 649:18–22. She further testified that "a physician would either have to "rule[] out" a concussion or treat a patient as if he or she had suffered a concussion. Sept. 13, 2021 Tr. at 622:6–13.

[10] The plaintiff objected to Dr. Margo "being identified as an expert in the standard of care with respect to the diagnosis of [a] concussion." Sept. 13, 2021 Tr. at 583:14–16. After the government clarified that Dr. Margo was being offered as an expert in family medicine regarding "the national standard of care with respect to how a physician would be able to assess a patient presenting with nonspecific symptoms[,]" id. at 587:11–13, the Court ruled that, "over objection[,]" it would "permit [Dr. Margo] to testify[,]" id. at 588:1–2, because the plaintiff's challenge "only goes to the question of how much weight [should] be given to her testimony as compared to others[, such as Dr. Cantu,] who have more experience in the field[of concussions,]" id. at 587:24–588:1. For the reasons discussed infra, see infra Section II.C.1–2, the Court assigns more weight to Dr. Cantu's testimony than it does to Dr. Margo's testimony, in light of her lack of experience regarding the standard of care for diagnosing and treating a concussion and the inconsistent testimony that she presented.

However, Dr. Margo stated that she could not cite any research to support the proposition that the standard of care permits a doctor to rule out a concussion if the doctor cannot identify the mechanism of the concussion. See Sept. 14, 2021 Tr. at 637:1–9.

II. CONCLUSIONS OF LAW

For the following reasons, the Court finds in favor of the plaintiff on her medical malpractice claim against the defendant. The Court will address in turn (1) the defendant's affirmative defenses of waiver and the borrowed servant doctrine; (2) the plaintiff's claims of medical malpractice and negligent infliction of emotional distress; (3) the defendant's affirmative defense of contributory negligence; and (4) the damages that the plaintiff is entitled to receive.

A. The Defendant's Waiver Defense

The defendant argues that the waiver of liability contained in the Acknowledgement of Risk form signed by the plaintiff precludes a finding of liability against the defendant, standing in the shoes of Dr. Williams, because "Dr. Williams was an 'agent' of American University at the time that he treated [the p]laintiff for her alleged injury." Def.'s Mem. at 54. In response, the plaintiff argues that "Dr. Williams was not acting as an agent, servant, employee, or even an[] independent contractor of American University[,]" and he therefore is not covered by the waiver of liability in the Acknowledgement of Risk form. Pl.'s Mem. at 67.[11] For the following

[11] As an initial matter, the waiver of liability in the Acknowledgement of Risk form clearly and unambiguously waives liability against "the University and its employees, officers, [and] agents[.]" Def.'s Ex. 15-2 at 1; see id. ("I (including my parents, legal guardians, and legal representatives) hereby agree to indemnify, defend[,] and hold harmless the University and its employees, officers, agents from any claims, demands, or suites for damages which may arise from my participation in the University's Intercollegiate Athletic Programs; or from any treatment, medical, or otherwise provided to me by the University's Sports Medicine Staff."). Accordingly, and because there is no dispute that Dr. Williams was neither an employee nor an officer of American University, see Def.'s Mem. at 54 (asserting that "[t]he sole issue before this Court now is whether Dr. Williams was an 'agent' of American University at the time that he treated [the p]laintiff for her [ ] injury"), the question for the Court to determine is whether the defendant, standing in the shoes of Dr. Williams, qualifies as an agent of American University. See id.

reasons, the Court concludes that the waiver of liability in the Acknowledgement of Risk form does not apply to the defendant standing in the shoes of Dr. Williams.

"The existence of an agency relationship is a question of fact, for which the person asserting the relationship has the burden of proof." Henderson v. Charles E. Smith Mgmt., Inc., 567 A.2d 59, 62 (D.C. 1989). Under District of Columbia law,[12] there is "a twofold test for determining whether [an agency] relationship exists: [(1)] the [C]ourt must look for evidence of the parties' consent to establish a principal-agent relationship[, and (2)], the [C]ourt must look for evidence that the activities of the agent are subject to the principal's control." Jackson v. Loews Wash. Cinemas, Inc., 944 A.2d 1088, 1097 (D.C. 2008) (internal quotation marks omitted and emphasis added). Although "[w]hether an agency relationship exists in a given situation depends on the particular facts of each case[,] [ ] factors to be considered include '(1) the selection and engagement of the servant, (2) the payment of wages, (3) the power to discharge, (4) the power to control the servant's conduct, (5) and whether the work is part of the regular business of the employer.'" Judah v. Reiner, 744 A.2d 1037, 1040 (D.C. 2000) (quoting LeGrand v. Ins. Co. of N. Am., 241 A.2d 856, 860 (D.C. 1982)). "Of these factors, the determinative one is usually 'whether the employer has the right to control and direct the servant in the performance of his work and the manner in which the work is to be done.'" Id. (quoting LeGrand, 241 A.2d at 860).

The Court begins with the first factor, namely whether there is any "evidence of the parties' consent to establish a principal-agent relationship."[13] Jackson, 944 A.2d at 1097. There

[12] As the parties correctly note, see Pl.'s Mem. at 2; Def.'s Mem. at 51, the law of the District of Columbia applies in this case as it is the "law of the place where the act or omission occurred." 28 U.S.C. § 1346(b)(1).

[13] Instead of citing the standard for whether an individual is acting as an agent for a principal, the defendant cites the standard for whether a government employee acted within the scope of his or her employment such that the Westfall Act applies, see Def.'s Mem. at 54, and argues, inter alia, that "Dr. Williams' treatment of [the p]laintiff took place (continued . . .)

was no evidence presented during the trial that American University consented to Dr. Williams acting as its agent. As the plaintiff correctly argues, see Pl.'s Mem. at 69, the defendant did not present testimony from any official representative of American University.[14] Moreover, the defendant fails to identify—and the Court is unaware of—any documentary evidence showing American University's consent to Dr. Williams acting as its agent. See Def.'s Mem. at 51–56. Although the defendant points to the Memorandum of Understanding and Letter of Agreement between the Consortium and Dr. Higgins, see Def.'s Mem. at 56, these agreements are between Dr. Higgins and the Consortium. See Def.'s Ex. 1 at USASUPP000013; Def.'s Ex. 2 at 6. American University is not a party to either agreement. See generally Def.'s Ex. 1; Def.'s Ex. 2. Moreover, the Professional Services Agreement between Dr. Higgins and American University explicitly states that Dr. Higgins "is retained by the University and shall perform the services under this [a]greement as an independent contractor[,]" Def.'s Ex. 14 ¶ 6, and "shall not be considered under the provisions of this Agreement or otherwise as having an employee status[,]" id. Likewise, under the Professional Services Agreement, Dr. Higgins "ha[d] no power or authority to act for, represent, or bind the University in any manner." Id. Thus, Dr. Higgins did not have the authority to consent on American University's behalf.

(. . . continued)
within the time and space limits of his sports medicine fellowship[,]" id. at 55, and thus Dr. Williams "was clearly a member of the American University sports medicine staff[,]" id. at 56. However, there is no dispute here that the Westfall Act applies. See Pl.'s Mem. at 1 (noting that Dr. Williams "was a federal employee at the time of the alleged negligence and was certified under a Westfall Certification to have been operating within the scope of his employment during the treatment in question"); Def.'s Mem. at 53 (noting the defendant's argument that "the United States stood in the place of Dr. Williams pursuant to the Westfall Act"). Accordingly, as the defendant's arguments to these ends are irrelevant, the Court need not consider them.

[14] The defendant identifies the testimony of Sean Dash, the head athletic trainer, who stated that "[t]he larger sports medicine staff also include[d the] physicians[,]" which would have included Dr. Williams, Sept. 14, 2021 Tr. at 738:14–15. See Def.'s Mem. at 56. However, there was no evidence introduced at trial that the head athletic trainer had authority to consent on American University's behalf to have Dr. Williams act as its agent.

Accordingly, the Court concludes that there is no evidence that American University consented to Dr. Williams acting as its agent and, thus, Dr. Williams was not an agent of American University.[15] Having addressed the defendant's waiver defense, Court now turns to the defendant's borrowed servant doctrine defense.

B. The Defendant's Borrowed Servant Doctrine Defense

The defendant argues that it "cannot be held liable for [Dr. Williams'] actions under District of Columbia law because Dr. Williams, as an American University Sports Medicine Fellow, was under the exclusive control of Dr. Higgins and his medical practice during the treatment of [the plaintiff] at American University." Def.'s Mem. at 56. In response, the plaintiff argues that "Dr. Williams was not acting under the supervision of . . . Dr. Higgins[, rather,] he was acting under his own accord under his duties as a military physician enrolled in the . . . [f]ellowship[.]" Pl.'s Mem. at 67. For the following reasons, the Court concludes that Dr. Williams was not the borrowed servant of Dr. Higgins.

Under District of Columbia law, "a person [who is] generally the servant of one master [i.e., the general employer,] can become the 'borrowed' servant of another[, i.e., the special employer]." Dellums v. Powell, 566 F.2d 216, 220 (D.C. Cir. 1977). If the "borrowed servant commits a tort while carrying out the bidding of the [special employer], vicarious liability for that tort attaches to the [special employer] and not to the general [employer]." Id. To determine whether the person was a "borrowed servant[,]" courts look to "whether the [special] employer had the 'power to control and direct [the employee] in the performance of [his or her] work."

[15] Because the Court concludes that there is no evidence that American University consented to Dr. Williams acting as its agent, the Court need not reach the question of whether Dr. Williams' activities were subject to American University's control. See Henderson v. Charles E. Smith Mgmt., Inc., 567 A.2d 59, 62 (D.C. 1989) (noting that both factors—consent and control—must exist for a principal-agent relationship to exist).

Harris-DeVaughn v. United States, 241 F. Supp. 3d 186, 189 (D.D.C. 2017) (quoting Dellums, 566 F.2d at 221) (alterations in original). For liability to attach to the special employer, the general employer must have entirely "relinquished control" of the employee's work and cannot be "a joint master" with the special employer. Id. Moreover, "there is a presumption that an actor remains in his general employment[,]" Dellums, 566 F.2d at 221.

The Restatement of Agency sets forth the following factors that are helpful to determining whether the "general or special employer, or both, have the right to control an employee's conduct[:]"

> the extent of control that an employer may exercise over the details of an employee's work and the timing of the work; the relationship between the employee's work and the nature of the special employer's business; the nature of the employee's work, the skills required to perform it, and the degree of supervision customarily associated with the work; the duration of the employee's work in the special employer's firm; the identity of the employer who furnishes equipment or other instrumentalities requisite to performing the work; and the method of payment for the work.

Restatement (Third) of Agency § 7.03 cmt. d(2) (Am. L. Inst. 2006).[16]

The Court finds that both the Consortium and Dr. Higgins exercised some control "over the details[,]" id., of the medical services that Dr. Williams provided to student-athletes at American University. To start, the documents governing the agreement between Dr. Higgins and the Consortium each reflect a sharing of authority between the Consortium and Dr. Higgins. For example, the Memorandum of Understanding states that "Consortium residents, while training at th[eir fellowship] Practice, will be under the exclusive control and supervision of the Practice or its designated medical officials[,]" Def.'s Ex. 1 ¶ 11, and that, "[w]hile training at the Practice,

[16] The District of Columbia Court of Appeals has looked to the Restatement for guidance. See, e.g., Convit v. Wilson, 980 A.2d 1104, 1114 n.15 (D.C. 2009) (quoting § 7.03 for the proposition that "a principal's vicarious liability turns on whether the agent is liable" (quoting Restatement (Third) of Agency § 7.03 cmt. b (Am. L. Inst. 2006)).

trainees will be under the supervision of Practice officials[—i.e., Dr. Higgins—]for training purposes and will be subject to, and be required to abide by, all applicable Practice rules and regulations[,]" id. ¶ 5. However, the Memorandum of Understanding further provides that "[t]he Consortium will have its faculty or staff members coordinate with Practice physicians the assignment trainees will assume and their attendance at selected clinics, conferences, courses, and programs conducted under the direction of the Practice[,]" id. ¶ 25, and "will ensure compliance with all applicable Practice rules and instructions and those of its physicians[,]" id. ¶ 27. Moreover, the Memorandum of Understanding contemplates that, "[w]hile assigned to the Practice and while performing services pursuant to this agreement, Consortium trainees remain employees of the United States performing duties within the course and scope of their federal employment." Id. ¶ 32.

Similarly, the Letter of Agreement indicates that responsibilities regarding Dr. Williams were divided between the Consortium and Dr. Higgins. For example, it states that Dr. Williams was to "work directly under the supervision of Dr. [ ] Higgins" and to "assist [Dr. Higgins] in the clinic with the care of patients with orthopedic problems" and "athlete rehabilitation." Def.'s Ex. 2 at 1. Moreover, the Letter of Agreement also provided that Dr. Higgins had "the overall responsibility for [Dr. Williams] at the rotation site[,]" i.e., American University. Id. at 4–5. However, "[a]lthough [Dr. Williams wa]s assigned to [Dr. Higgins] for the duration of the rotation," Colonel deWeber, as "the Fellowship Director[, wa]s ultimately responsible for the quality of the rotation and the Fellow's educational experience." Id. at 4.

Finally, the Fellowship Manual demonstrates that both Dr. Higgins and the Consortium were responsible for supervising Dr. Williams. See Def.'s Ex. 5 at 66 ("The lines of resident supervision are as follows:" (1) "First line: faculty from the site at which residents are currently

rotating[,]" (2) "Second line: Program Director[,]" and (3) "Third line: Associate Program Director.").

Testimony presented during the trial indicated that, despite the provisions regarding supervision in these agreements, the medical services provided by Dr. Williams at American University were not regularly supervised by anyone. No one from the Consortium, including Colonel deWeber, supervised Dr. Williams's treatment of patients at American University. See Sept 13, 2021 Tr. at 475:10–14. And, "for any issues that came up at a game or in a clinic that were brought to Dr. Williams[,]" Dr. Higgins would not directly supervise Dr. Williams, but rather Dr. Williams "could treat [the patient] on his own." Sept. 14, 2021 Tr. at 773:6–10. Moreover, even though Dr. Higgins considered himself to be Dr. Williams' supervisor, he did not engage in direct supervision of Dr. Williams and simply made himself available to Dr. Williams, if needed. See id. at 775:5–25. Dr. Higgins testified that "none of the fellows" with whom Dr. Higgins worked, including Dr. Williams, "consulted [Dr. Higgins] regularly" about patients. Id. at 773:21–25. Similarly, although Dr. Higgins had the authority to review Dr. Williams's work or evaluation of patients, there was no testimony as to a specific instance or a practice of Dr. Higgins doing so. Dr. Williams testified that he was "acting independently" of Dr. Higgins when providing primary care treatment at American University, Sept. 13, 2021 Tr. at 564:14–17, and he never briefed Dr. Higgins on patients "unless it had to do with an orthopedic injury[,]" id. at 474:24, because, "[a]s an orthopedic surgeon that was outside [Dr. Higgins'] scope to talk about colds, rashes[, i.e., non-orthopedic issues,]" id. at 474:19–22. Dr. Williams further testified that he "did not [discuss his treatment of the plaintiff with Dr. Higgins] because this was a medicine issue[,] not an orthopedic issue." Id. at 491:14–17; see also Sept. 14, 2021

Tr. at 790:22–23 (testimony of Dr. Higgins that he did not discuss the plaintiff's case with Dr. Williams).

Furthermore, discipline, if it became necessary, would be jointly imposed by Dr. Higgins and the Consortium. See Def.'s Ex. 2 at 5 (stating that "[t]he Fellow Preceptor is encouraged to contact the Fellowship Director at any time if there are any issues or concerns" and "[t]he Fellowship Director must be notified immediately of any problems"); Sept. 14, 2021 Tr. at 776:4–8 (testimony of Dr. Higgins that he "d[id]n't know" how discipline would be handled "because [he had] never had that issue with any of the fellows . . . , so [he was] not sure whether [he had] that ability or not[,]" but his "assumption [is that he] would talk to the program chair[,]" i.e., Colonel deWeber).

Finally, even though Dr. Higgins would arrange the clinic hours at American University around Dr. Williams's schedule, Dr. Williams's schedule was ultimately controlled by the Consortium. See Sept. 14, 2021 Tr. at 759:22–760:16. The Consortium did not provide the location and equipment for Dr. Williams to treat patients, see id. at 759:13–21; Def.'s Ex. 1 ¶ 17 (requiring Dr. Higgins to make facilities available to Dr. Williams), although it retained the right to conduct a site visit, see Def.'s Ex. 1 ¶ 22.

Based on this evidence, the Court concludes that, when Dr. Williams was treating patients at American University, he was theoretically subject to the control of both Dr. Higgins and the Consortium. However, for liability to shift solely to Dr. Higgins, Dr. Higgins must have had exclusive authoritative direction and control over Dr. Williams. See Dellums, 566 F.2d at 222 (noting that "the borrowed servant doctrine . . . conceives of authoritative direction and control vesting in one master to the exclusion of the other" (emphasis added)). Because a preponderance of the evidence does not support the position that Dr. Higgins exercised exclusive

authoritative direction and control over Dr. Williams,[17] the Court concludes that the defendant did not satisfy its burden of showing that Dr. Williams was the borrowed servant of Dr. Higgins.[18]

[17] Arguing against the proposition that Dr. Higgins exercised authoritative control over Dr. Williams, the defendant asserts that, "[f]ar from establishing direction and control, [Colonel] deWeber's dormant availability demonstrates the power to merely 'suggest details' regarding Dr. Williams'[] clinical treatment of student[-]athletes at American University, which is patently insufficient to establish joint control between the United States and Dr. Higgins." Def.'s Mem. at 63–64. The defendant is correct that, in Dellums, the District of Columbia Circuit distinguished between "authoritative direction and control" over an employee and "the power merely to suggest details or the necessary cooperation." 566 F.2d at 221. However, the evidence here does not support that the Consortium lacked "authoritative direction and control[,]" id., over Dr. Williams. For example, the Consortium had the responsibility to "ensure compliance with all applicable Practice rules and instructions and those of its physicians[,]" Def.'s Ex. 1 (Memorandum of Understanding) ¶ 27.

[18] In arguing that Dr. Higgins had exclusive control of Dr. Williams, the defendant cites two cases: McBee v. United States, 101 Fed. App'x 5 (5th Cir. 2004), an unpublished decision by the United States Court of Appeals for the Fifth Circuit, and Afonso v. City of Boston, 587 F. Supp. 1342 (D. Mass. 1984), a decision from the District of Massachusetts. See Def.'s Mem. at 60–61.

In McBee, "[t]he McBees sued the [g]overnment after the death of their son for the alleged negligence of Dr. Timothy Porea, who was an active member of the United States Navy at the time of their son's death" and was working at the Baylor College of Medicine. 101 Fed. App'x at 5. Citing the facts that (1) the agreement between the Navy and Baylor stated that "Porea was directly supervised by Baylor staff, not independent contractors" and (2) testimony "establish[ed] that Baylor directly controlled the patient care rendered by Porea[,]" the Fifth Circuit concluded that "the district court did not err in concluding that Porea was the 'borrowed servant' of Baylor for vicarious liability purposes." Id. at 6. However, the facts in this case are distinguishable from McBee. Here, Dr. Williams was not "directly supervised" by Dr. Higgins and Dr. Higgins did not "directly control[] the patient care rendered by" Dr. Williams. Id. Moreover, the agreements between Dr. Higgins and the Consortium demonstrate that the supervisory duties were shared by both the Consortium and Dr. Higgins. Accordingly, McBee does not contradict the Court's conclusion that Dr. Williams was not the borrowed servant of Dr. Higgins.

In Afonso, the District of Massachusetts concluded that a doctor "on military duty with the [United States] Air Force[,]" who was "detailed to a private university, where he was training in a residency program at the hospital[,]" 587 F. Supp. at 1343, was "not under the control of the Air Force" because (1) "[n]o military personnel were involved in the direction of either the hospital or the university residency program[,]" (2) "[t]he only interest of the Air Force in this residency was the education and training that [the resident] received[,]" and (3) "[t]he military retained no right to control [the resident's] provision of medical services in the hospital[,]" id. at 1347. Even though the resident "received a salary from the Air Force and . . . may have been subject to military discipline for activities other than his provision of medical care[,]" these factors did not "contradict the conclusion that [the resident] was not under the Air Force's control in the performance of his medical functions." Id. Similar to McBee, Afonso is distinguishable from this case. Unlike in Afonso, here the military itself—through the Consortium—directed the fellowship in which Dr. Williams was participating and, as discussed above, the Consortium retained aspects of supervision and control over Dr. Williams. Accordingly, Afonso also does not undermine the Court's conclusion that Dr. Williams was not the borrowed servant of Dr. Higgins.

C. The Plaintiff's Claim of Medical Malpractice

The Court now turns to the plaintiff's medical malpractice claim. Under District of Columbia law, "[i]n a medical malpractice negligence action[,] the plaintiff must present medical expert testimony to establish the standard of care, expert testimony that the defendant's conduct deviated from that standard of care, and expert testimony establishing that the alleged deviation proximately caused the plaintiff's injuries." Cleary v. Grp. Health Ass'n, 691 A.2d 148, 153 (D.C. 1997). Upon the presentation of such evidence, "the Court evaluates the evidence to determine whether the plaintiff has established each element of the negligence claim against the defendant by a preponderance of the evidence." Rhodes v. United States, 967 F. Supp. 2d 246, 287 (D.D.C. 2013). Therefore, the Court will begin by first addressing the applicable standard of care, before analyzing whether Dr. Williams breached that standard.

1. The Applicable Standard of Care

In order to establish the applicable standard of care, "the plaintiff must establish through expert testimony the course of action that a reasonably prudent doctor with the defendant's specialty would have taken under the same or similar circumstances." Meek v. Shepard, 484 A.2d 579, 581 (D.C. 1984). The expert "must establish that a particular course of treatment is followed nationally either through reference to a published standard, [discussion] of the described course of treatment with practitioners outside the District at seminars or conventions, or through presentation of relevant data." Strickland v. Pinder, 899 A.2d 770, 773–74 (D.C. 2006) (alteration in original). There must be an "attempt to link [ ] testimony to any certification process, current literature, conference or discussion with other knowledgeable professionals," etc. Id. at 774. Accordingly,

> [e]xpert testimony "is not sufficient if it consists merely of the expert's opinion as to what he or she would do under similar circumstances. Nor is it enough for the expert simply to declare that the [defendant] violated the national standard of

> care. Rather, the expert must clearly articulate and reference a standard of care by which the defendant's actions can be measured. Thus the expert must clearly relate the standard of care to the practices in fact generally followed by other comparable . . . facilities or to some standard nationally recognized by such units."

Briggs v. Wash. Metro. Area Transit Auth., 481 F.3d 839, 846 (D.C. Cir. 2007) (emphasis and all but first alteration in original) (quoting Clark v. District of Columbia, 708 A.2d 632, 635 (D.C. 1997)).

Here, the parties offered two expert witnesses to establish the applicable standard of care: (1) Dr. Cantu, the plaintiff's expert; and (2) Dr. Margo, the defendant's expert. Relying upon Dr. Cantu's testimony, the plaintiff argues that the "standard of care required that Dr. Williams should have diagnosed a concussion on October [5], 2011[,[19]] and that he [should have] placed [the plaintiff] into a concussion protocol until she was asymptomatic." Pl.'s Mem. at 60. In contrast, relying upon Dr. Margo's testimony, the defendant argues that Dr. Williams was only required to take "the SCAT[]2 [results] into consideration along with [the plaintiff's] history, physical exam, and neurocognitive tests before diagnosing and treating [her]" and "the standard of care did not require Dr. Williams to immediately remove [the plaintiff] from practice and [game participation]." Def.'s Mem. at 69. For the following reasons, the Court finds that the standard of care required the diagnosis of a concussion on October 5, 2011, and the removal of the plaintiff from practice and game participation until she fully recovered.

The Court begins by addressing the relative weight it assigns to the testimony offered by the experts. The plaintiff's expert regarding the standard of care, Dr. Cantu, was qualified by the

[19] In this sentence in her proposed findings of fact and conclusions of law, the plaintiff refers to October 4, 2011, rather than October 5, 2011. See Pl.'s Mem. at 60 (arguing that "the standard of care established that Dr. Williams should have diagnosed a concussion on October 4, 2011"). Because Dr. Williams's appointment with the plaintiff did not occur until October 5, 2011—and therefore it would not have been possible for Dr. Williams to diagnose a concussion on October 4, 2011—the Court construes the reference to October 4, 2011, as a typographical error.

Court as an expert in the field of neurosurgery, specifically with respect to concussions. See Sept. 10, 2021 Tr. at 204. Dr. Cantu testified to his extensive work regarding concussions, see id. at 206:15–216:11, including "running a concussion center" that is "active in athletic head and spine injuries, their prevention, [and] their treatment[,]" id. at 206:16–19; serving as "a clinical professor of neurosurgery and neurology" and "co-found[ing]" a center related to "[c]hronic traumatic encephalatrophy[,]" a "progressive neurodegenerative disease related to repetitive head trauma[,]" at Boston University, id. at 207:3–6; "lecturing on concussions" and "writing on concussions" since the 1970s, see id. at 210:6–7; "publishing" the standards related to treatment of athletes with concussions, see id. at 210:23–211:9; and serving as a consultant regarding the treatment of athletes with concussions, see id. at 211:12–212:4. He also stated that, during his career, he has "treated thousands of athletes" with concussion-related symptoms. Id. at 210:15.

In contrast, the defendant's expert regarding the standard of care, Dr. Margo, was qualified by the Court as an expert in the field of family medicine, see Sept. 13, 2021 Tr. at 565, 582, and did not testify to any specific qualifications regarding either concussions or neurology, see id. at 579–88. Specifically, Dr. Margo testified that she had never been asked to diagnose an athlete with a concussion, see id. at 581:10–12, although she did testify that she had assessed approximately twenty individuals over the course of her career to determine whether they had a concussion, id. at 585:14–17. Dr. Margo testified that her testimony regarding the applicable standard of care for the diagnosis of a concussion in the plaintiff's situation would be based on a family medicine doctor's "curriculum and training[,]" of which "sports medicine is [one] part[,]" and "journals" that "publish articles on every topic that [a family medicine doctor] cover[s] on a regular basis[,]" including "one on concussion just a few years ago[.]" Id. at 586:6–11.

As the defendant correctly noted at trial, "someone with Dr. Margo's background can certainly speak to the national standard of care with respect to how a [family medicine] physician would be able to assess a patient presenting with nonspecific symptoms[,]" in light of the fact that "someone trained in internal family medicine needs to be able . . . to diagnose a particular ailment out of [ ] [a] nearly [ ] endless supply of possibilities[.]" Id. at 587:2–13. Moreover, as the defendant notes, Dr. Cantu is not "a family medicine doctor" like Dr. Williams, see Def.'s Mem. at 67, and the Court is obligated to determine the standard of care for a "reasonably prudent doctor with [Dr. Williams's] specialty[,]" Meek, 484 A.2d at 581. However, the Court is mindful that the particular issue in this case is not merely whether Dr. Williams took the correct steps during his appointment with the plaintiff on October 5, 2011, as Dr. Margo testified that the national standard of care for family medicine doctors required, but rather whether the national standard of care for a family medicine doctor with Dr. Williams's background and training required Dr. Williams to diagnose a concussion and remove the plaintiff from practice and game participation until she recovered.[20]

[20] The defendant asks the Court to disregard Dr. Cantu's testimony in favor of Dr. Margo's testimony, because "Dr. Williams is a family medicine doctor, [and thus] Dr. Margo's expert testimony establishes the standard of care for a reasonably prudent family medicine doctor[,] not . . . Dr. . . . Cantu, an expert in the field of neurosurgery, specifically with respect to concussions." Def.'s Mem. at 67. Specifically, the defendant argues that the standard of care only required Dr. Williams to "(1) take a medical history, (2) conduct a physical exam, (3) evaluate any laboratory test results, (4) make a differential diagnosis, and (5) 'narrow down the differential diagnosis and come up with what [he thought] the problem is and then [ ] treat it.'" Id. at 67–68 (quoting Sept. 13, 2021 Tr. at 590:23–591:3). However, the defendant misstates the relevant inquiry, as there is no dispute regarding the steps Dr. Williams took in examining the plaintiff. Rather, the issue in this case concerns Dr. Williams's diagnosis, i.e., whether he breached the standard of care by ruling out—and, accordingly, failing to treat—the plaintiff's concussion. Moreover, in regards to the standard of care applicable to diagnosing and treating a patient with concussion-associated symptoms, Dr. Margo and Dr. Cantu testified that the symptoms that the plaintiff was experiencing at the October 5, 2011 appointment were sufficient to diagnose a concussion, a lack of a known mechanism was an insufficient basis to rule out a concussion in an athlete, and concussion treatment should be implemented until a concussion can be ruled out. See Sept. 10, 2021 Tr. at 270:21–271:4 (testimony of Dr. Cantu); Sept. 13, 2021 Tr. at 460:24–461:7 (testimony of Dr. Margo); accord Sept. 10, 2021 Tr. at 381:17–19 (testimony of Dr. Vollmar). Accordingly, because Dr. Cantu's and Dr. Margo's testimony aligns concerning the key issues regarding the standard of care in this case, the Court disagrees with the defendant that Dr. Cantu's testimony should be disregarded.

To that end, Dr. Cantu's testimony is both pertinent and compelling, as it is based on his extensive participation in setting the national standards for the diagnosis and treatment of athletes with concussions. See, e.g., Sept. 10, 2021 Tr. at 210:23–211:9. In contrast, Dr. Margo's ability to speak to that particular issue is limited. She cited no specific support for her opinion regarding whether the national standard of care required a diagnosis of a concussion in the plaintiff's situation, absent vague references to sports medicine curricula and training, see Sept. 13, 2021 Tr. at 586:6–8 ("So sports medicine is part of our curriculum and training, so that's one place you would see concussions primarily."), and a journal article on concussions, see id. at 586:8–11 ("We get journals, they have a regular you know they publish articles on every topic that we cover on a regular basis, so there was one on concussion just a few years ago for instance."). Moreover, she has no background in treating athletes who present with concussion-related symptoms. See id. at 612:19–23 (in response to a question from the Court whether she had "examined someone who's been involved in athletic activity as it relates to concussion[,]" Dr. Margo testified that she "do[es]n't remember such a case").[21] Accordingly, to the extent that their testimony conflicts, the Court will credit Dr. Cantu's testimony over Dr. Margo's testimony as to the diagnosis and treatment of concussion-related symptoms in an athlete. However, the Court will credit Dr. Margo's testimony as to the steps that family medicine doctors take to assess, diagnose, and treat their patients.

In any event, Dr. Margo's testimony and Dr. Cantu's testimony were largely consistent. Both Dr. Cantu and Dr. Margo testified that the plaintiff's symptoms and SCAT2 test results—

[21] Additionally, as discussed infra, in general, Dr. Margo was not a compelling witness in regards to concussions. She provided inconsistent testimony between her direct and cross-examination testimony and provided little-to-no support for the opinions she offered. For this reason as well, the Court assigns less weight to her testimony than to that of Dr. Cantu.

both the October 4, 2011 and October 5, 2011 11:00 a.m. test results—were consistent with her having sustained a concussion.[22] See Sept. 13, 2021 Tr. at 617:19–622:3 (testimony of Dr. Margo); Sept. 14, 2021 Tr. at 634:23–635:1 (testimony of Dr. Margo that the October 5, 2011 11:00 a.m. SCAT2 test result reflected elevated concussion-associated symptoms); Sept. 10, 2021 Tr. at 228:18–229:3 (testimony of Dr. Cantu). Moreover, even though Dr. Williams stated that he was unable to diagnose a concussion without knowing the mechanism, see Sept. 13, 2021 Tr. at 503:5–6, both Dr. Cantu and Dr. Margo testified that the lack of a known mechanism was not a sufficient reason to rule out a concussion in the plaintiff's case.[23] See Sept. 10, 2021 Tr. at 270:21–271:4 (testimony of Dr. Cantu); Sept. 13, 2021 Tr. at 460:24–461:7 (testimony of Dr. Margo); see also id. at 381:17–19 (testimony of Dr. Vollmar). Furthermore, Dr. Cantu testified that the applicable standard of care in 2011 required that "if you can't rule out a concussion, treat

[22] As an initial matter, the Court concludes that, to the extent that Dr. Williams did not review the October 4, 2011 and October 5, 2011 6:00 a.m. SCAT2 test results, he breached the standard of care. As discussed earlier, see supra Section I.C, Dr. Williams and Earls disputed whether Earls presented Dr. Williams with a copy of the plaintiff's October 4, 2011 and October 5, 2011 6:00 a.m. SCAT2 test results. However, Dr. Cantu testified that the standard of care would require a doctor to review the results of prior testing, including "go[ing] through the medical records that are relevant to the possibility of a concussion[,]" which would include "the SCAT[2 test] that was done on [October 4, 2011,]" and . . . the two SCAT[2]s on [October 5, 2011.]" Sept. 10, 2021 Tr. at 227:18–228:2. Moreover, Dr. Margo testified that the standard of care for a family physician required the physician to obtain the patient's medical history, which included asking the patient questions and reviewing available medical records. See Sept. 13, 2021 Tr. at 593:23–594:1. Accordingly, in light of the requirement that a physician review the patient's medical history, the presence of Earls in the room with Dr. Williams and the plaintiff during the appointment, and Earls's testimony that she had the October 4, 2011, and October 5, 2011 6:00 a.m. test results with her at the October 5, 2011 appointment, the Court concludes that Dr. Williams breached the standard of care by not fully reviewing the plaintiff's medical history, which would have included review of all three SCAT2 test results.

[23] Dr. Margo presented inconsistent testimony on this issue. On direct examination, she testified that a doctor only has to treat a patient as if they have a concussion "if [the doctor] know[s] that there's a mechanism of injury[,]" and, "if [the doctor] do[es]n't think there's an injury then concussion really isn't on [the list of] differential" diagnoses. Sept. 14, 2021 Tr. at 649:18–22. However, on cross-examination, Dr. Margo testified that a physician could not rule out a concussion due to a lack of a known mechanism "without further evaluation . . . [b]ecause athletes get shots all the time[.]" Sept 13, 2021 Tr. at 461:2–7. Considering (1) Dr. Cantu's testimony that a lack of a known mechanism was an insufficient reason to rule out a concussion, see Sept. 10, 2021 Tr. at 270:21–271:4 (testimony of Dr. Cantu), which was consistent with Dr. Vollmar's fact testimony, see id. at 381:17–19 (testimony of Dr. Vollmar); and (2) the fact that, on cross-examination, Dr. Margo stated that she could not cite any research to support the proposition that the standard of care permits a doctor to rule out a concussion if the doctor cannot identify a mechanism, see Sept. 14, 2021 Tr. at 637:1–9, the Court credits Dr. Margo's testimony that a physician could not rule out a concussion due to lack of a known mechanism, rather than her testimony to the contrary.

a concussion until you can rule it out, and if you can't rule it out, treat it as such[,]" Sept. 10, 2021 Tr. at 252:6–13, basing his opinion on a November 2008 consensus statement on concussions in sports, see id. at 251:14–21. Specifically, he testified that "any individual that's symptomatic should not be allowed to continue with their activity" and "should be removed from the participation in whatever sport." Id. at 274:9–14. Dr. Margo also testified that a doctor had to rule out a concussion or treat the individual as having a concussion. See Sept. 13, 2021 Tr. at 622:10–17. Accordingly, the Court finds that the applicable standard of care required that Dr. Williams not rule out that the plaintiff had suffered a concussion when he treated her on October 5, 2011, because the plaintiff was experiencing concussion-associated symptoms that were sufficient for him to diagnose a concussion and the lack of a known mechanism was an insufficient reason to rule out a concussion.

Moreover, Dr. Cantu, an expert superbly qualified to provide testimony regarding concussions, testified that the standard of care required that someone with a concussion be removed from practice and game participation. See Sept. 10, 2021 Tr. at 229:2–3. Therefore, based on Dr. Cantu's and the other expert testimony, the Court also finds that the applicable standard of care required the plaintiff to be removed from participation in practice and games on October 5, 2011, until she had fully recovered.

2. Whether Dr. Williams Breached the Standard of Care

Having concluded that the applicable standard of care required doctors not to rule out a concussion based solely on the lack of a known mechanism and to remove an athlete from practice and game participation unless they had ruled out a concussion, the Court now turns to whether Dr. Williams breached the standard of care. For the following reasons, the Court finds that he did.

When the plaintiff saw Dr. Williams on October 5, 2011, Dr. Williams had learned from Earls that the plaintiff "complain[ed] of extreme fatigue, lack of concentration, dizziness, [i]nab[i]l[ity] to focus on ball and games, pressure in head," but "d[id] not recall a mechanism." Sept. 13, 2021 Tr. at 436:2–12. Earls also testified that she informed Dr. Williams that the plaintiff "may have been hit by a girl's shoulder during a game." Id. at 416:3–8. Although Dr. Williams "specifically asked [the plaintiff] [ ] the same question multiple different ways to try and get a mechanism or time frame when her symptoms started[,]" the plaintiff "could not give [him] one." Id. at 491:25–492:3; see also id. at 445:16–23 (testimony of Earls confirming that the plaintiff informed Dr. Williams that she did not remember a hit to the head). Dr. Williams performed a physical examination, including neurocognitive testing as indicated by the SCAT2 test. Because the plaintiff's "overall score [on the SCAT2 test] was at her baseline" or "actually slightly improved from [her] baseline minus the symptom score[,]" id. at 502:22–23, and "[s]he had no mechanism[,]" id. at 503:5, Dr. Williams ruled out a concussion, see id. at 503:4–6.

As discussed above, the purported lack of a known mechanism—particularly in light of the plaintiff's participation in a contact sport where concussing-causing mechanisms could occur frequently, see Sept. 10, 2021 Tr. at 245:14–16—was not a sufficient reason for Dr. Williams to rule out a concussion. Moreover, Dr. Cantu and Dr. Margo testified that the plaintiff's SCAT2 test results were "very much diagnostic of a concussion[,]" id. at 228:14, and that her symptoms, along with the SCAT2 test results, were "consistent with a concussion and she should have been removed from practice and play," id. at 227:14–17. See also id. at 229:16–19 (testimony by Dr. Cantu that, within a reasonable degree of medical certainty, "there[were] not only sufficient symptoms to make the diagnosis and test results to make the diagnosis"); Sept. 14, 2021 Tr. At 634:23–635:1 (testimony of Dr. Margo that the results of the plaintiff's October 5, 2011 11:00

a.m. SCAT2 test result, i.e., the test that Dr. Williams testified that he did see, reflected elevated symptoms associated with a concussion relative to the plaintiff's baseline SCAT2 test result). Therefore, the Court finds that Dr. Williams breached the standard of care by not removing the plaintiff from practice and game participation on October 5, 2011.

3. Causation

Having concluded that Dr. Williams breached the applicable standard of care by ruling out that the plaintiff had a concussion and not removing the plaintiff from practice and game participation on October 5, 2011, the Court now turns to whether Dr. Williams's breach proximately caused the injuries alleged by the plaintiff. Under District of Columbia law, "[t]he causal relationship between [a] breach and [an] injury is established through expert testimony[,] 'based on a reasonable degree of medical certainty, that the defendant's negligence is more likely than anything else to have been the cause (or a cause) of [the] plaintiff's injuries.'" Perkins v. Hausen, 79 A.3d 342, 344 (D.C. 2013) (quoting Derzavis v. Bepko, 766 A.2d 514, 522 (D.C. 2000)). For the following reasons, the Court concludes that the plaintiff has met her burden to establish by a preponderance of the evidence that Dr. Williams's failure to diagnose a concussion and remove her from practice and participating in games resulted in her injuries.

The evidence presented by the plaintiff during the trial established that she suffers from post-concussion syndrome resulting from a moderate traumatic brain injury, resulting in neurocognitive defects, headaches, mental fog, exhaustion, and concentration issues, among other symptoms. See Sept. 9, 2021 Tr. at 86:18–24, 87:1, 87:14–18, 89:11–15; Sept. 10, 2021 Tr. at 233:6–12, 388:8–14. Dr. Cantu testified that, within a reasonable degree of medical certainty, "if [the plaintiff] had been removed from practice and play on [October 5, 2011,] she would have recovered completely or at least recovered back to what her baseline was on [her baseline SCAT2] test[,]" but that, "[b]ecause she continued to practice and play and take more

head trauma in the process, her post-concussion symptoms were aggravated[.]" Sept. 10, 2021 Tr. at 230:9–18. Dr. Cantu also testified that "[p]ost-concussion symptoms are aggravated by physical exertion alone[,]" and, thus, the plaintiff's continuing to practice and play in games during the remainder of the Fall 2011 field hockey season—even absent additional head trauma, about which there is no such evidence in the record—resulted in her continuing symptoms. Id. at 230:25–231:6. Accordingly, the Court concludes that the plaintiff has established, through Dr. Cantu's testimony, that Dr. Williams's failure to remove her from practice and game participation on October 5, 2011, "is more likely than anything else to have been the cause (or a cause) of [the] plaintiff's injuries." Perkins, 79 A.3d at 344 (D.C. 2013) (internal quotation marks omitted).

The defendant argues that the plaintiff has not met her burden because "it is just as likely that the initial alleged blow to her head caused all of [the p]laintiff's injuries[,]" Def.'s Mem. at 74, and, "at no time did Dr. Cantu testify that [the plaintiff's] symptoms were not caused by the initial alleged injury[,]" id. at 73. Certainly, the mechanism that caused the plaintiff's concussion—whether from the Richmond player's shoulder or another, unspecified mechanism—is a cause of the plaintiff's injuries. However, "the defendant's negligence" need not be "the cause" of the plaintiff's injuries, rather it need only be "more likely than anything else to have been . . . a cause[] of [the] plaintiff's injuries[,]" Perkins, 79 A.3d at 344 (emphasis added), i.e., there must be "a direct and substantial causal relationship between the defendant's breach of the standard of care and the plaintiff's injuries[,]" Snyder v. George Wash. Univ., 890 A.2d 237, 247 (D.C. 2006). Here, Dr. Cantu's testimony establishes that relationship, based on his expert opinion that, absent Dr. Williams's negligence in failing to remove the plaintiff from practice and game participation on October 5, 2011, the plaintiff "would have recovered

completely or at least recovered back to what her baseline was on [her baseline SCAT2] test." Sept. 10, 2021 Tr. at 230:9–18.

Accordingly, the Court concludes that Dr. Cantu's testimony that the failure to remove the plaintiff from practice and game participation on October 5, 2011, which resulted in her not returning to her baseline SCAT2 level, see Sept. 10, 2021 Tr. at 230:9–18, is sufficient to demonstrate by a preponderance of the evidence that Dr. Williams' negligence is a proximate cause of the plaintiff's injuries.[24]

D. The Defendant's Defense of Contributory Negligence

The Court now turns to the defendant's affirmative defense that the plaintiff was contributorily negligent. The defendant argues that the plaintiff should be found to have been contributorily negligent because (1) "[i]nstead of duly reporting her health issues after the Richmond game, while continuing to experience symptoms, she continued to practice and play in games" before alerting Earls; and (2) "she did not disclose a mechanism of injury to Dr.

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[24] The plaintiff also brought a claim of negligent infliction of emotional distress against the defendant. However, although she sets forth applicable law regarding this claim in the "Applicable Law" section of her proposed findings of fact and conclusions of law, see Pl.'s Mem. at 7–10, she failed to present any argument regarding it in her "Proposed Conclusions of Law Based Upon the Evidence" section, see id. at 60–75. Rather, she cursorily mentions it in her conclusion, stating—without citation to either case law or the record—that

> if for some reason the Court does not believe that Dr. Williams committed medical malpractice, the preponderance of [the] evidence still demonstrates that Dr. Williams had an obligation to care for the plaintiff's emotional well-being or the plaintiff's emotional well-being was necessarily implicated by the nature of his undertaking to or relationship with [the plaintiff], and serious emotional distress was especially likely to be caused by his negligence and was so caused.
>
> The claims of medical malpractice and negligent infliction of emotional distress are two separate claims. [The p]laintiff is entitled to non-economic damages under both claims; however, she is not entitled to duplicative damages. If the Court is to make the finding that [the d]efendant committed medical malpractice, it does not need to also find that [the d]efendant committed negligent infliction of emotional distress in order to award non-economic damages.

Id. at 75. Accordingly, in light of (1) the plaintiff's failure to present any argument related to her negligent infliction of emotional distress claim and (2) the plaintiff's waiver of the claim "[i]f the Court is to make the finding that [the d]efendant committed medical malpractice," id., the Court concludes that the plaintiff's negligent infliction of emotional distress claim is waived and will thus dismiss this claim.

Williams[.]" Def.'s Mem. at 75–76. In response, the plaintiff argues that (1) she "took the steps available to attempt to receive care when her symptoms developed" and (2) "there is no claim that failing to report a specific blow to the head is negligent conduct by a [p]laintiff." Pl.'s Mem. at 71. The Court will address in turn each of the defendant's contributory negligence theories.

"The District [of Columbia] remains one of the few jurisdictions that generally retains a pure contributory negligence defense[,]" Asal v. Mina, 247 A.3d 260, 271 n.11 (D.C. 2021), i.e., a "claimant's contributory negligence can act as a complete defense to the defendant's liability for negligence[,]" Jarrett v. Woodward Bros., Inc., 751 A.2d 972, 985 (D.C. 2000). "Contributory negligence is found where the plaintiff, by encountering the risk created by the defendant's breach of duty, departed from an objective standard of reasonable care." Dennis v. Jones, 928 A.2d 672, 677 (D.C. 2007) (internal quotation marks omitted). Generally, a "plaintiff is barred from recovery if his [or her] negligence was a substantial factor in causing his [or her] injury[.]" Whiteru v. Wash. Metro. Area Transit Auth., 25 F.4th 1053, 1057 (D.C. Cir. 2022) (internal quotation marks omitted). "In medical malpractice cases . . . , contributory negligence is a valid defense if the patient's negligent act concurs with that of the physician and creates an unreasonable risk of improper medical treatment." Durphy v. Kaiser Found. Health Plan of Mid-Atlantic States, Inc., 698 A.2d 459, 467 (D.C. 1997). In contrast, conduct that "precedes that of the physician and provides the occasion for medical treatment[,]" e.g., negligent conduct that results in an injury for which the plaintiff seeks medical treatment, does not constitute contributory negligence.[25] Id. Moreover, "subsequent negligence of the patient, which

[25] The plaintiff misrepresents this holding in Durphy, arguing that it stands for the proposition that any conduct by the plaintiff that precedes the medical treatment cannot be construed as contributory negligence. See Pl.'s Mem. at 71. However, Durphy clearly states only that actions that precede the allegedly negligent medical treatment and provide the reason for the treatment cannot be the basis for a contributory negligence claim. See Durphy, 698 A.2d at 467 ("[W]here the patient's negligent act merely precedes that of the physician and provides the occasion for medical treatment, contributory negligence is not a permissible defense." (internal quotation marks omitted)).

aggravates the injury primarily sustained at the hands of the physicians, does not discharge the physician from liability, but only goes [to] mitigation of damages." Id. (internal quotation marks and alterations omitted). Because "[c]ontributory negligence is an affirmative defense, . . . it is the defendant's burden 'to establish, by a preponderance of the evidence, that the plaintiff failed to exercise reasonable care.'" Whiteru, 25 F.4th at 1058 (quoting Poyner v. Loftus, 694 A.2d 69, 71 (D.C. 1997)).

1. Whether the Plaintiff Was Contributorily Negligent by Continuing to Practice and Participate in Games Between September 25, 2011, and October 5, 2011

The defendant first argues that the plaintiff was contributorily negligent by continuing to practice and play in games between the conclusion of the Richmond game on September 23, 2011, and her appointment with Dr. Williams on October 5, 2011. See Def.'s Mem. at 75. For the following reasons, the Court concludes that the defendant has not met its burden to demonstrate that this conduct by the plaintiff amounts to contributory negligence.

The plaintiff testified that her symptoms began on September 25, 2011, after the Richmond game, see Sept. 9, 2021 Tr. at 42:16–43:5, but that she did not tell anyone about them because she "was scared and confused[,]" id. at 43:21, and thought that "this is going to go away because [she was] supposed to play field hockey[,]" id. at 44:10–13. The plaintiff finally reported the symptoms to Jennings and Earls on October 1, 2011, including that she "c[ould]n't think, and it[wa]s scaring [her], and [she] c[ould]n't see correctly." Id. at 44:19–45:5. Jennings "told [the plaintiff] to eat some ice cream and get some rest[,]" id. at 45:8, and the plaintiff followed up with Earls in person on October 2, 2011, see Pl.'s Ex. 3 at 10032, and via email on October 3, 2011, see Sept. 9, 2021 Tr. at 46:13–14.

Dr. Cantu testified that,

> if [the plaintiff] had been removed from practice and play on [October 5, 2011,] she would have recovered completely or at least recovered back to what her

> baseline was on [her SCAT2 baseline] test. Because she continued to practice and play and take more head trauma in the process, her post-concussion symptoms were aggravated, which is the expected situation if you can continue to have somebody even physically exert, much less take head trauma with post-concussion syndrome, and converted it into something which now is permanent.

Sept. 10, 2021 Tr. at 230:9–18. Accordingly, there is expert testimony that, even considering the fact that the plaintiff continued to practice and participate in games prior to October 5, 2011—when she saw Dr. Williams for the first time—she could have made a complete recovery if Dr. Williams had not acted negligently on October 5, 2011. In contrast, the defendant identifies no expert testimony that the plaintiff's practicing and game participation between September 25, 2011—when she first started experiencing symptoms—and October 5, 2011, was a cause, let alone a "substantial factor in causing . . . her injury[,]" Waas, 648 A.2d at 180. See Def.'s Mem. at 74–76. Rather, the defendant only identifies testimony by Dr. Cantu that the plaintiff's practicing and game participation from October 5, 2011, through November 2011, i.e., after Dr. Williams's negligence, resulted in her post-concussion syndrome and permanent symptoms. See id. at 76 (quoting Sept. 10, 2021 Tr. at 229:20–230:18).

Therefore, because any negligence by the plaintiff in continuing to practice and participate in games prior to her October 5, 2011 appointment with Dr. Williams would have "merely precede[d] th[e negligence] of" Dr. Williams and helped to "provide the occasion for [Dr. Williams's] medical treatment[of the plaintiff,]" Durphy, 698 A.2d at 467, the Court concludes that the defendant has not satisfied its burden of proving that the plaintiff was contributorily negligent by continuing to practice and play in games between September 23, 2011, and October 5, 2011.

2. Whether the Plaintiff Was Contributorily Negligent for Failing to Disclose a Mechanism of Injury to Dr. Williams

Second, the defendant argues that the plaintiff's "negligent failure to disclose a mechanism of injury created an unreasonable risk of improper medical treatment." Def.'s Mem. at 76. For the following reasons, the Court concludes that the plaintiff's failure to identify a mechanism to Dr. Williams did not "create[] an unreasonable risk of improper medical treatment[,]" id., and therefore, the defendant has not satisfied its burden of showing that the plaintiff was contributorily negligent.

First, similar to its claim that the plaintiff was contributorily negligent for continuing to practice and participate in games between September 23, 2011, and October 5, 2011, the defendant identifies no expert testimony to support its proposition that the plaintiff's failure to disclose a mechanism to Dr. Williams contributed in any way to her injury. See id. at 74–76. Because the defendant has the burden to "prove all elements of negligence[,]" Burton v. United States, 668 F. Supp. 2d 86, 107 (D.D.C. 2009), its failure to prove causation is fatal to this claim of contributory negligence, see id. at 108.

Second, even if the defendant had introduced evidence of causation, both expert witnesses who testified stated that a lack of information regarding a mechanism was not a sufficient reason to rule out a concussion. See Sept. 10, 2021 Tr. at 270:21–271:4 (testimony of Dr. Cantu); Sept. 13, 2021 Tr. at 460:24–461:7 (testimony of Dr. Margo). Therefore, the plaintiff's failure to tell Dr. Williams about being hit by a shoulder in the Richmond game would not excuse Dr. Williams's negligence in ruling out and thus failing to treat the plaintiff for a

concussion. Accordingly, the Court concludes that the defendant has failed to prove that the plaintiff was contributorily negligent for failing to disclose a mechanism to Dr. Williams.[26]

Therefore, for the above reasons, the Court concludes that the defendant has failed to prove that the plaintiff was contributorily negligent.

E. Damages

Having concluded that the defendant is liable for the plaintiff's injuries, the Court now turns to the issue of damages. The plaintiff argues that the Court should award $1,210,108 in "recoverable economic damages[,]" as well as "a fair and justifiable amount of non-economic damages[,] to make [her] whole again from the permanent moderate traumatic brain injury that Dr. Williams' negligence caused." Pl.'s Mem. at 75. In response, the defendant argues that, regardless of liability, the "[p]laintiff is not entitled to any damages." Def.'s Mem. at 81. For the following reasons, the Court concludes that the plaintiff is entitled to $1,037,047 in economic damages and $800,000 in non-economic damages, to be reduced by 5% to account for the effects of the plaintiff's subsequent concussion in April 2013.

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[26] The defendant also argues that the plaintiff was contributorily negligent for her "continued practice and play up through November 2011,]" Def.'s Mem. at 76, citing Dr. Cantu's testimony that the plaintiff's "permanent symptoms" resulted from her continuing to practice and play from October 5, 2011, through November 2011, see Sept. 10, 2021 Tr. at 229:20–230:18. However, "a patient's non-cooperation with the doctor's instructions after the doctor's alleged negligent act and subsequent negligence of the patient, which aggravates the injury primarily sustained at the hands of the physicians, does not discharge the physician from liability, but only goes in mitigation of damages." Durphy, 698 A.2d at 467 (internal quotation marks and alterations omitted). Therefore, because the basis for this claim of contributory negligence concerns actions by the plaintiff after Dr. Williams's alleged negligence, the Court finds that the plaintiff was not contributorily negligent for continuing to practice and participate in games through November 2011.

Moreover, this case is not a situation where the plaintiff negligently failed to comply with her doctor's instructions, thereby exacerbating her injury. See, e.g., id. To the contrary, Dr. Williams did not instruct the plaintiff to refrain from participating in games and practicing for the remainder of the Fall 2011 field hockey season. And the plaintiff testified that she "continued [to] practice and [participate in games] up through November 2011," Def.'s Mem. at 76, because she "was told that no one [wa]s diagnosing [her] with a concussion, so [she] must play[,]" Sept. 9, 2021 Tr. at 57:18–25. Accordingly, because the defendant has not demonstrated that the plaintiff failed to comply with any of Dr. Williams's or any other doctor's instructions, the Court also concludes that mitigation of damages based on this theory would be inappropriate.

1. Economic Damages

To support her calculation for an award of economic damages, the plaintiff cites Dr. Crouse's testimony that she "would have reduced annual earnings and reduced life expectancy as a result of her cognitive functional limitations, and that would translate into an overall loss of earning capacity of $1,037,047 to $1,210,108[,]" depending on whether she acquired only a Bachelor's, as compared to a graduate degree. Pl.'s Mem. at 75; see Sept. 10, 2021 Tr. at 289:22–290:14. In response, the defendant challenges Dr. Crouse's calculations as "misleading, speculative at best, and clearly unsupported by the evidence." Def.'s Mem. at 81. For the following reasons, the Court concludes that Dr. Crouse's calculations are credible and that the plaintiff is entitled to an award of $1,037,047 in economic damages.

b. The Defendant's Challenge to Dr. Crouse's Methodology

The Court begins with the defendant's challenge to Dr. Crouse's methodology. As discussed above, see supra Section I.M.1.b, Dr. Crouse testified that the plaintiff "would have reduced annual earnings and reduced life expectancy as a result of her cognitive functional limitations, and that would translate into an overall loss of earning capacity of $1,037,047 to $1,210,108[,]" depending on whether the plaintiff acquired only a Bachelor's degree or also obtained a graduate degree. Sept. 10, 2021 Tr. at 289:22–290:14. The defendant argues that (1) the ACS data upon which Dr. Crouse relied is flawed, and (2) the evidence does not support the proposition that the plaintiff "will now earn 20 percent less and work 10 years fewer than another person with her similar educational attainment." Def.'s Mem. at 78–79. The Court will address the defendant's arguments in turn.

"In general, . . . plaintiffs [are not required] to prove their damages 'precisely' or 'with mathematical certainty[,]'" although a plaintiff must "'provide some reasonable basis upon

which to estimate damages.'" President, Dirs. of Georgetown Coll. v. Wheeler, 75 A.3d 280, 293 (D.C. 2013) (quoting District of Columbia v. Howell, 607 A.2d 501, 506 (D.C. 1992)).

Beginning with the defendant's challenge to the reliability of the ACS data used by Dr. Crouse, the defendant argues that the ACS "is not applicable for a single individual with a particular disability, as the ACS represents persons with physical and emotional difficulties, including mental difficulties[,]" "does not capture or take into account any changes in the respondent's conditions[,]" and "does not capture those who might be considered disabled who lost some amount of work for whatever reason, but later returned to the workforce." Def.'s Mem. at 78–79. None of the defendant's arguments are persuasive.

First, the defendant fails to consider that Dr. Crouse's opinion is based on both the ACS data and his individual opinion of the plaintiff's limitations, see Sept. 10, 2021 Tr. at 292:1–293:12; 296:24–297:7, as determined by the tests he conducted, his review of the plaintiff's medical and educational records, and his interview with the plaintiff. Therefore, even though the ACS itself is not attuned to a particular individual, Dr. Crouse's opinion is not based exclusively on the ACS and does take into account the plaintiff's particular situation.

Second, although the ACS "does not capture or take into account any changes in [a] respondent's conditions" or whether he or she "later returned to the workforce[,]" Def.'s Mem. at 78–79, the Court has found, based on Dr. Cantu's testimony, that the plaintiff's injuries are now permanent, see Sept. 10, 2021 Tr. at 230:9–18. Therefore, even if the ACS assumes that the disabilities accounted for on the survey are permanent, this assumption does not make the ACS inapplicable to the plaintiff's case.[27]

[27] The defendant also cursorily argues that "[t]he ACS [ ] has been challenged in the past due to its limited reliability[,]" Def.'s Mem. at 78, however, the portion of the transcript that the defendant cites to support this proposition only states that "[t]he ACS has been challenged from time to time[,]" Sept. 10, 2021 Tr. at 341:10,
(continued . . .)

The Court next considers the defendant's argument that the evidence does not support the concept that the plaintiff "will now earn 20 percent less and work 10 years fewer than another person with her similar educational attainment[,]" Def.'s Mem. at 79, which the Court finds similarly not persuasive. Evidence cited by the defendant itself demonstrates that, post-concussion, the plaintiff is not achieving at the same level at which she did prior to 2011. For example, the defendant acknowledges that the plaintiff's grade point average decreased from high school to college, but notes that it was "a difference of only .17[,]" and that the plaintiff was able to complete her college education, even though it took a total of six, rather than four, years to acquire her degree. See id. However, although the defendant frames the duration of the plaintiff's undergraduate degree as "only . . . two more years[,]" id., an additional two years to acquire a four-year degree is a fifty-percent increase in the amount of time it took the plaintiff to receive her degree. This is not insignificant.

The defendant also argues that "Dr. Crouse testified that he was aware that [the p]laintiff successfully traveled to Nepal on several occasions after her injury and that she even maintained a blog of her travels, all of which conflicts with the functional limitations that she self-reported to him during his interview." Id. However, Dr. Crouse's opinion does not assume that the plaintiff is fully disabled or not able to perform any work. See, e.g., Sept. 10, 2021 Tr. at 332:25–333:1 (testimony of Dr. Crouse that the plaintiff would still be able to earn a salary of $60,000 per year, with her disability). Moreover, the Court finds credible the plaintiff's explanation concerning why her trips to Nepal were not inconsistent with her functional limitations. See, e.g., Sept. 9, 2021 Tr. at 85:23–86:7 (testimony of the plaintiff that, "in

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(. . . continued)
without any supporting testimony regarding either the type of challenges or their accuracy, see generally id. Accordingly, the Court assigns no weight to this testimony.

Nepal . . . [, i]t's actually so much more conducive to my symptoms"); id. at 197:3–9 (testimony of the plaintiff's mother that, "when [the plaintiff] goes to a third[-]world country, . . . she can handle that because it's extremely laid back and there[are] not a lot of time restraints" and "she isolates when she's away"). Accordingly, the Court concludes that the evidence of the plaintiff's symptoms and functional limitations does not conflict with Dr. Crouse's opinion.

Mindful of the fact that the plaintiff is not obligated to "prove [her] damages 'precisely' or 'with mathematical certainty[,]'" Wheeler, 75 A.3d at 293 (quoting Howell, 607 A.2d at 506), the Court concludes that, through Dr. Crouse's testimony, the plaintiff has met her burden to "provide some reasonable basis upon which to estimate damages[,]" id.

c. Whether the Plaintiff Would Have Obtained a Graduate Degree

Having concluded that Dr. Crouse's methodology was reasonably accurate, the Court now considers which of the two income amounts that Dr. Crouse opined the plaintiff would not earn as a result of her disability is reasonable: (1) $1,037,047, if the plaintiff obtained only a Bachelor's degree absent the injury, or (2) $1,210,108, if the plaintiff obtained a graduate degree in addition to a Bachelor's degree. See Sept. 10, 2021 Tr. at 289:22–290:14. For the following reasons, the Court concludes that the plaintiff should be awarded $1,037,047, because she failed to reasonably prove that she would have obtained a graduate degree absent her injury.

The plaintiff testified that she "always wanted to keep doing school[,]" Sept. 9, 2021 Tr. at 88:24, and that she has applied to "so many [graduate] programs" in anthropology, but "keep[s] getting rejected because [she] can[not] function," id. at 89:1–2. However, as the defendant correctly notes, see Def.'s Mem. at 41, she did not provide any evidence regarding the number of schools to which she applied, the specific schools, or the relative merit of her application. The plaintiff also failed to present any testimony as to her life plans absent Dr.

Williams's negligence or whether it would be reasonable to expect that she would have obtained a graduate degree that would have resulted in the additional earnings estimated by Dr. Crouse. Therefore, concluding that she would have also acquired a graduate degree would be purely speculative. Accordingly, the Court concludes that the plaintiff failed to provide a reasonable basis upon which the Court could conclude that she would have obtained a graduate degree absent her injury and, as a result, she should be awarded economic damages in the amount of $1,037,047, which comports with her acquiring only a Bachelor's degree absent her injury.

2. Non-Economic Damages

The Court will now address the plaintiff's demand for an award of non-economic damages. The plaintiff requests "a fair and justifiable amount of non-economic damages to make [her] whole again from the permanent moderate traumatic brain injury that Dr. Williams caused." Pl.'s Mem. at 75; see also Pl.'s Supp. Mem. The defendant does not address the plaintiff's request for non-economic damages in its post-trial filing, see generally Def.'s Mem., and did not file a response to the plaintiff's post-hearing submission regarding non-economic damages. The Court will first address whether any award of non-economic damages is merited and, if so, what amount the plaintiff is entitled to receive.

a. Whether an Award of Non-Economic Damages Is Warranted in this Case

Awards of non-economic damages are "fact[-]specific and the fact[]finder has broad discretion in calculating damages for pain and suffering." Rhodes v. United States, 967 F. Supp. 2d 246, 324 (D.D.C. 2013). As the Standardized Civil Jury Instructions for the District of Columbia state,[28] damages may be awarded for a negligence claim by the factfinder based upon

[28] As other members of this court have "use[d] these jury instructions as a 'useful reference' when considering a damages award[,]" Rhodes, 967 F. Supp. 2d at 325, the Court will also look to the instructions for guidance regarding the calculation of non-economic damages in this case.

(continued . . .)

consideration, inter alia, of the following factors: (1) "the extent and duration of any physical injuries sustained by [the plaintiff];" (2) "the effects that any physical injuries have on the overall physical and emotional well-being of [the plaintiff];" (3) "any physical pain and emotional distress that [the plaintiff] has suffered in the past or may suffer in the future;" or (4) "any inconvenience [that the plaintiff] has experienced in the past or may experience in the future." Standardized Civil Jury Instructions for the District of Columbia § 13.01 (2022).[29]

In this case, trial testimony disclosed the severe emotional and mental toll that post-concussion syndrome has had on the plaintiff. The plaintiff's parents testified that she is now unable to complete routine daily tasks, like cleaning or organizing her affairs, see, e.g., Sept. 9, 2021 Tr. at 146:8–147:7 (testimony of the plaintiff's father); 188:3–18 (testimony of the plaintiff's mother); or going to a store, see id. at 188:3–18, and that her "social life is nonexistent[,]" id. at 190:20. The plaintiff's father also testified that the plaintiff's demeanor

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(. . . continued)

[29] Section 13.01 of the Standardized Civil Jury Instructions for the District of Columbia lists eight harms for which a factfinder may award damages:

> 1. the extent and duration of any physical injuries sustained by [the plaintiff];
> 2. the effects that any physical injuries have on the overall physical and emotional well-being of [the plaintiff];
> 3. any physical pain and emotional distress that [the plaintiff] has suffered in the past or may suffer in the future;
> 4. any disfigurement or deformity suffered by [the plaintiff], as well as any humiliation or embarrassment associated with the disfigurement or deformity;
> 5. any inconvenience [that the plaintiff] has experienced in the past or may experience in the future;
> 6. any medical expenses incurred by [the plaintiff] in the past or may incur in the future;
> 7. any loss of earnings that [the plaintiff] has incurred in the past or may incur in the future; and
> 8. any damage or loss to [the plaintiff's] personal property.

Standardized Civil Jury Instructions for the District of Columbia § 13.01 (2022). Damages based on the fourth, sixth, and eighth harms are not warranted here because the plaintiff has not asserted any "disfigurement or deformity[,]" and has not presented any evidence regarding the "medical expenses [she] incurred" or "any damage or loss to [her] personal property." See id. Moreover, the plaintiff's "loss of earnings[,]" id., has already been calculated as part of the economic damages awarded in this case. See supra Section II.E.1. Accordingly, the Court will consider only the first, second, third, and fifth harms listed in § 13.01 in determining whether non-economic damages are able to be awarded in this case.

changed following the concussion, resulting in her being "very touchy" and preventing him from "talk[ing] to her reasonably about" issues like the disorganization and uncleanliness in her household. Id. at 167:14–25. The plaintiff also testified about the emotional toll that post-concussion syndrome has had on her. See id. at 76:18–77:2; 79:17–25; 81:4–6.

Furthermore, the plaintiff has experienced, and continues to experience, physical and mental changes resulting from the post-concussion syndrome. Following the concussion, she "was diagnosed with depression and anxiety," id. at 87:17, for which she takes prescription medication, see id. at 87:14–15. She also continues to suffer from headaches, see id. at 86:12–13; fatigue, see id. at 86:14–24; vision problems, see id. at 87:1–10; and mental processing delays, see id. at 89:11–13. The Court credits the plaintiff's testimony that she did not regularly experience any of these symptoms prior to September 2011. See id. at 118:23–119:13. As indicated earlier, see supra Section II.C.3, Dr. Cantu testified that, if Dr. Williams had not failed to diagnose the concussion and had removed the plaintiff from practice and game participation, she would have made a complete recovery, see Sept. 10, 2021 Tr. at 230:9–12, 260:9–15. Furthermore, according to Dr. Cantu, the plaintiff's continued symptoms are the result of Dr. Williams's failure to diagnose the plaintiff's concussion and treat her accordingly, see id. at 235:5–7, and are now permanent, see id. at 229:25–230:1, 241:15–16.

In addition to numerous hospital, physician, and medical specialist visits to diagnose and treat her post-concussive syndrome and moderate traumatic brain injury after Dr. Williams negligently ruled out a concussion, the plaintiff also endured many invasive and uncomfortable tests, including multiple spinal taps and MRIs. See, e.g., Pl.'s Ex. 44 at 23001; Pl.'s Ex. 13 at 7038–40; Pl.'s Ex. 11 at 5000. She has also been prescribed multiple medications to address her post-concussive symptoms, including Zoloft, Adderall, and Propranolol. See, e.g., Pl.'s Ex. 4 at

9012; Pl.'s Ex. 9 at 3003–05. In addition to physicians, the plaintiff has also seen biofeedback providers, physical therapists, and psychotherapists for the treatment of her post-concussive symptoms. See, e.g., Pl.'s Ex. 44 at 23001–03.

The plaintiff has also experienced significant interruption of the plans she had for her future, including graduating two years later than she expected, see Sept. 9, 2021 Tr. at 74:17–20; abandoning her pursuit of a minor in German, see id. at 74:25–75:1; being unable to study abroad for a semester, see id. at 75:2–15; and failing to obtain course credit for the alternative spring recess program in Moldova in which she participated, see id. at 79:7–10. Although the plaintiff has been able to work in Nepal, see, e.g., id. at 81:18–24, she credibly testified that there are significant differences between American and Nepalese culture that make her employment there possible, including a lack of emphasis on punctuality in Nepal, see, e.g., id. at 85:10–14. She further testified that "this past year has been terrible because this country[,]" i.e., the United States, is "not set up for someone like me[,]" who "do[es]n't know what tomorrow is going to look like" and is "going to get fired" if she is unable to work at least forty hours per week. Id. at 85:15–22.

Despite these significant limitations, the plaintiff has not been completely incapacitated. In addition to traveling to and working in Nepal, she has maintained a blog related to her experiences in Nepal, see id. at 197:11–15, and learned the country's language during her visits, see id. at 91:18–23. She also travelled to Moldova in the spring of 2012, although she was not able to receive course credit for the trip, see id. at 196:9–10, and to Germany in the spring of 2013, see id. at 93:17–21. She was able to complete her Bachelor's degree, see id. at 74:14–17, with disability accommodations, see id. at 73:24–74:13. And, she provided volunteer services to

Nepalese refugees while living with her parents during the year-and-a-half when she took a leave of absence from college, see id. at 76:18–77:22.

Based on the evidence set forth above, the Court concludes that the "extent and duration of" the plaintiff's "physical injuries[,]" "the effects" of those "injuries [ ] on the [plaintiff's] overall physical and emotional well-being[,]" the "physical pain and emotional distress" suffered by the plaintiff, and the "inconvenience [that the plaintiff] has experienced[,]" Standardized Civil Jury Instructions for the District of Columbia § 13.01 (2022), all weigh in favor of awarding the plaintiff non-economic damages.

b. The Amount of Non-Economic Damages that Is Warranted in this Case

Having determined that the plaintiff is entitled to an award of non-economic damages, the Court now turns to the amount of the award that is warranted. Certainly, "determining an appropriate figure for intangible losses such as emotional suffering is notoriously difficult[.]" Bodoff v. Islamic Republic of Iran, 424 F. Supp. 2d 74, 86 (D.D.C. 2006). The Court's review of other medical malpractice cases and cases where a plaintiff was awarded non-economic damages for injuries including post-concussion syndrome has yielded a wide range of monetary awards.[30] See, e.g., Rhodes, 967 F. Supp. 2d at 324 (collecting cases); Becerril v. Eas[t] Bronx NAACP Child Development Ctr., 2009 WL 2972992, at *3 (S.D.N.Y. Sept. 17, 2009) (award of $50,000 in non-economic damages for "extreme emotional distress resulting from her depression, migraine headaches, and post-concussive syndrome"); Grajales-Romero v. Am. Airlines, 194 F.3d 288, 300 (1st Cir. 1999) (award of $150,000 for "chronic neck pain and a loss of cognitive functions, including concentration and memory" affirmed); Rufo v. United States, 2020 WL 968973, at *4 (C.D. Cal. Feb. 28, 2020) (award of "$500,000 in past non-economic

[30] In their proposed findings of fact and conclusions of law, the parties did not provide any citations to similar cases where non-economic damages were awarded. See generally Pls.' Mem.; Def.'s Mem.; Pl.'s Supp.

damages and $1,500,000 in future non-economic damages is appropriate" for a mild traumatic brain injury); Smith v. Kmart Corp., 177 F.3d 19, 30 (1st Cir. 1999) (award of $500,000 did not "warrant a remittitur" when "[t]he evidence of Smith's physical and emotional pain and suffering [wa]s abundant"); Huber v. United States, 2019 WL 4540225, at *3–4 (D.D.C. Sept. 19, 2019) (awarding a plaintiff $56,032 for his physical injuries; $150,000 "for the effects that the physical injuries had on [the p]laintiff's overall physical and emotional well-being[,]" $60,000 for future pain, and $30,000 for inconvenience); Powell v. Hellenic Lines, Ltd., 347 F. Supp. 855, 861 (E.D. La. 1972) (awarding a plaintiff $15,000 for post-concussion syndrome when the plaintiff's "headaches [we]re intermittent and [we]re relieved by mild sedatives, [ ] the dizziness [wa]s not constant, [ ] the duration of these symptoms c[ould]not be fixed with any degree of certainty[,] and [ ] the plaintiff [wa]s expected to improve in time"); Bourgeois v. Roudolfich, 580 So. 2d 699 (5th Cir. 1991) (plaintiff's award of $5,000 due to suffering from dizziness, headaches, and post-concussion syndrome affirmed).

The cases also reflect awards in the range of $5,000 to $20,000 for head injuries that were not completely incapacitating and that resolved within a few years. See, e.g., Ware v. United States, 1994 WL 46739, at *11 (N.D. Cal. Feb. 4, 1994) (awarding a plaintiff $23,000 for pain and suffering for "substantial injuries as a result of [an] accident, both orthopedic and neurological" that "resolved at maximum within approximately a year, to a year and an half, after the accident"); Sheehan v. United States, 822 F. Supp. 13, 17 (D.D.C. 1993) (awarding a plaintiff whose "prior symptoms of memory loss, inability to concentrate, severe headaches, amnesia, fatigue, lack of stamina, and impaired mobility were temporarily aggravated by [an] accident" $10,000 in compensation and "$5,000 for emotional distress and pain and suffering"); Powell v. Hellenic Lines, Ltd., 347 F. Supp. 855, 861 (E.D. La. 1972) (awarding a plaintiff

$15,000 for post-concussion syndrome when the plaintiff's "headaches [we]re intermittent and [we]re relieved by mild sedatives, [ ] the dizziness [wa]s not constant, [ ] the duration of these symptoms c[ould]not be fixed with any degree of certainty[,] and [ ] the plaintiff [wa]s expected to improve in time"); Peterson v. State Farm Ins. Co., 1994 WL 193690, at *6 (E.D. La. May 6, 1994) (awarding a plaintiff $20,000 for pain and suffering for "a scalp laceration, a concussion, and post[-]concussion syndrome with post[-]traumatic emotional difficulties, for approximately two years, with great improvement toward the end of that two[-]year period").

Here, although the plaintiff is not completely incapacitated, her symptoms are not insignificant and are now permanent due to Dr. Williams' negligence. Therefore, the Court concludes that an award that accounts for both the emotional and physical suffering that the plaintiff has already experienced and the suffering that she will continue to experience for the rest of her life is appropriate. Accordingly, the Court will assess damage in the amount of $12,000 per year, which is consistent with the awards for non-severe, temporary injuries in Ware, Sheehan, Powell, and Peterson, and multiply that sum by the years that the plaintiff has already and will continue to suffer from her injuries. To calculate the number of years, the Court begins with the plaintiff's age at the time of Dr. Williams' negligence, i.e., twenty years old, see Pl.'s Ex. 4 at 6094 (Lancaster General Hospital records recording the plaintiff's birthdate), and then adopts the age to which Dr. Crouse identified that it is more probable than not that the plaintiff will live, i.e., 83, see Pl.'s Ex. 54A at 13. Because Dr. Cantu testified that concussions can take a short period of time to resolve even absent negligent treatment, see Sept. 10, 2021 Tr. at 255:21–23 (testimony by Dr. Cantu that "[m]ost of the metabolic issues [related to a concussion] are thought to probably occur in the first week or two after a concussion"), the Court will not award damages to the plaintiff for the first year following her injury. Thus, calculating

the number of years from the year following the plaintiff's injury through her expected lifespan, the Court arrives at a duration of 62 years during which she has or will experience the consequences of her misdiagnosed concussion. Multiplying those years by $12,000 per year, the Court finds that an award of $744,000 is warranted to compensate the plaintiff for the pain and suffering caused by Dr. Williams's negligence.

Additionally, the Court determines that an award is necessary to account for the inconvenience to the plaintiff, including the effect on the plaintiff's academic goals and social life and the battery of invasive medical tests and medical appointments she underwent. In Huber, the court awarded Huber "$30,000 in inconvenience damages" to account for "collapsing in his office; staying five nights in a hospital on three separate occasions; a trip to a neurologist; meeting with multiple doctors to determine the source of his extreme headaches, memory impairments, and double vision; meeting with two brain injury specialists; and performing neurological tests with three neuropsychologists." Huber, 2019 WL 4540225, at *4. In light of the plaintiff's numerous hospital, physician, and medical specialist visits, as well as the many invasive tests that she underwent and the disruption to her plans for her future, the Court will award the plaintiff an additional $56,000 for the inconvenience she has suffered, for a total non-economic damages award of $800,000. See, e.g.,

From the Court's review of the cases with awards for head injuries, and in light of the emotional and physical suffering and inconvenience that the plaintiff has experienced since the concussion and will experience for the rest of her life, the Court determines that an award of $800,000 is reasonable.

3. Whether Evidence of a 2013 Concussion Reduces the Amount of Damages

The defendant also argues that "th[e] Court should reduce any damage[s] award equal to the injury and/or exacerbation of symptoms that [the p]laintiff experienced as a result of the

[additional] concussion [she suffered] in 2013[.]" Def.'s Mem. at 82. In response, the plaintiff argues that "all of the expert testimony provided within a reasonable degree of medical certainty established that all of [the plaintiff's] damages were permanent by one year, and no other testimony was provided to demonstrate that [a concussion in 2013] caused any additional damages." Pl.'s Mem. at 74. For the following reasons, the Court concludes that the damages award should be reduced by five percent to account for the plaintiff's 2013 concussion.

"In the District of Columbia, the primary purpose of compensatory damages in personal injury cases is to make the plaintiff whole." Calva-Cerqueira v. United States, 281 F. Supp. 2d 279, 293 (D.D.C. 2003) (internal quotation marks omitted). "The burden of proving that the injured party could have avoided some or all of his [or her] damages rests on the defendant[,]" and "requires a showing that the plaintiff failed to take reasonable action to minimize damages, and that such failure . . . enhanced damages beyond what they otherwise would have been." 3 Damages in Tort Actions § 16.01(3); see also Foster v. George Wash. Univ. Med. Ctr., 738 A.2d 791, 794 (D.C. 1999) ("[T]he burden of proving that damages could have been mitigated rests with the party that committed the breach." (internal quotation marks and alterations omitted)). Specifically, a "tortfeasor must establish with reasonable certainty the amount of damages that might have been avoided[,]" although "this burden of proof in no way relieves the injured party of the initial burden of proving the damages claimed." 3 Damages in Tort Actions § 16.01(3).

Dr. Vollmar's testimony at trial and contemporaneous medical records from his treatment of the plaintiff support the finding that the plaintiff was diagnosed with an additional concussion in April 2013. See Sept. 14, 2021 Tr. at 802:9 (testimony by Dr. Vollmar noting that, at an April 18, 2013 appointment with the plaintiff, she reported that "she [had] hit her head on the

ground"); id. at 802:25 (testimony by Dr. Vollmar that he documented a "concussion" in the plaintiff's medical record); id. at 803:23–24 (testimony by Dr. Vollmar that the plaintiff "had some increased symptoms after" this April 2013 concussion). At trial, Dr. Cantu testified that additional "head trauma" can result in "post-concussion symptoms [being] aggravated[.]" Sept. 10, 2021 Tr. at 230:14–18.

However, the record is unclear as to the extent to which this additional concussion enhanced the plaintiff's injuries. Neither party identifies any evidence regarding how long the increased symptoms lasted or their effect on the symptoms that the plaintiff was already experiencing. See Pl.'s Mem. at 73–74; Def.'s Mem. at 81–82. Neither Dr. Cantu nor Dr. Margo provided any testimony regarding the impact of this additional concussion.

Furthermore, the record reflects that the plaintiff was experiencing similar symptoms both prior to and after the April 2013 concussion. For example, on February 14, 2013, at an appointment prior to the April 2013 concussion, Dr. Vollmar noted that the plaintiff was still experiencing persistent dizziness, headaches, anxiety, and visual disturbances, although there had been significant improvements in her symptoms. See Pl.'s Ex. 20 at 110030. Similarly, the two neuropsychologist reports—which are dated June 22, 2012, and December 16, 2013, and therefore pre-date and post-date the April 2013 concussion, respectively—both indicate that the plaintiff reported headaches, fatigue, and difficulties in focusing and concentrating. See Pl.'s Ex. 4 (Neuropsychological Reports).

Moreover, expert testimony at trial confirmed that the permanency of the plaintiff's injury predated the April 2013 concussion. Dr. Cantu testified that the plaintiff's injuries were permanent due to the failure to remove the plaintiff from practice and game participation on October 5, 2011, see Sept. 10, 2021 Tr. at 230:9–18, long before the additional concussion in

April 2013. Moreover, prior to April 2013, Dr. Vollmar had already diagnosed the plaintiff with a "moderate traumatic brain injury[,]"—i.e., with "continuing symptoms and deficits from a cognitive standpoint in focus and headaches that ha[d] lasted longer than a year" and were thus believed to be permanent. Id. at 386:17–25. The plaintiff was also already diagnosed with ADD and depression. Id. at 378:23–379:1.

As discussed above, see supra Sections II.E.1–2, the plaintiff has met her burden to "provide some reasonable basis upon which to estimate damages[,]" Wheeler, 75 A.3d at 293 (quoting Howell, 607 A.2d at 506). To successfully challenge the plaintiff's estimation of her damages, the defendant "must establish with reasonable certainty the amount of damages that might have been avoided[,]" 3 Damages in Tort Actions § 16.01(3). Here, the Court finds that the defendant has "establish[ed] with reasonable certainty[,]" id., through Dr. Cantu's and Dr. Vollmar's testimony, that the plaintiff experienced a concussion in April 2013 and that it "aggravated" her "post-concussion symptoms[,]" Sept. 10, 2021 Tr. at 230:14–18, resulting in "increased symptoms after" this April 2013 concussion, Sept. 14, 2021 Tr. at 803:23–24. Accordingly, the Court will reduce the award of damages to account for the effect of the 2013 concussion on the plaintiff's permanent post-concussion symptoms. However, because the defendant did not identify any testimony regarding the extent to which the 2013 concussion aggravated the plaintiff's symptoms, see generally Def.'s Mem., the Court concludes that the damages award should only be reduced by a de minimis amount. Accordingly, the Court will reduce the award by five percent.

III. CONCLUSION

For the reasons set forth above, the Court finds in favor of the plaintiff on her medical malpractice claim against the defendant, in the amount of $1,745,194.65, which constitutes an

award of $1,037,047 in economic damages and $800,000 in non-economic damages, reduced by five percent.[31]

SO ORDERED this 28th day of July, 2022.[32]

REGGIE B. WALTON
United States District Judge

[31] Following the bench trial in this case, the Court directed the parties to submit proposed findings of fact and conclusions of law, addressing, inter alia, (1) "if Dr. Williams was negligent in his treatment of the plaintiff, whether the government bears responsibility for the entirety of the plaintiff's damages, in light of the Court's ruling that American University is not subject to liability because of the Acknowledgement of Risk form signed by the plaintiff;" and (2) "if Dr. Williams was negligent in his treatment of the plaintiff and the government does not bear responsibility for the entirety of the damages, the percentage of the damages for which the government is liable[.]" Order at 1–2 (Sept. 17, 2021), ECF No. 178. In her proposed findings of fact and conclusions of law, the plaintiff argues that "[t]he District of Columbia follows the law of joint and several liability[,]" i.e., "[a]ny one potential defendant is liable for 100% of the damages[,]" and therefore the defendant is liable for the entirety of the plaintiff's damages. Pl.'s Mem. at 74–75. The defendant does not address this issue in its proposed findings of fact and conclusions of law. See generally Def.'s Mem.

The plaintiff is correct that, under District of Columbia law, "whether joint tortfeasors act independently or in concert, . . . [e]ach is bound to [the injured party] separately and for the full injury[.]" Beckman v. Farmer, 579 A.2d 618, 655 (D.C. 1990). Accordingly, the defendant is liable for the entirety of the damages awarded by the Court.

[32] The Court will contemporaneously issue an Order consistent with this Memorandum Opinion.