

CAUSE NO: _____

DAVID EDWARD SAUCEDO, II and
MARIANA TERRAZAS SAUCEDO,
Individually and on Behalf of I.S., a Minor
Child

Plaintiffs

v.

EL PASO CHILDREN’S HOSPITAL
CORPORATION, DR. ROBERTO
CANALES, M.D., and DR. RODOLFO
FIERRO-STEVENSON, M.D.

Defendants

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IN THE DISTRICT COURT

_____ JUDICIAL DISTRICT

EL PASO COUNTY, TEXAS

JURY TRIAL DEMANDED

PLAINTIFFS’ ORIGINAL PETITION

Plaintiffs DAVID EDWARD SAUCEDO, II and MARIANA TERRAZAS SAUCEDO, individually and on behalf of I.S., a minor child, file this Original Petition against Defendants EL PASO CHILDREN’S HOSPITAL CORPORATION, DR. ROBERTO CANALES, M.D., and DR. RODOLFO FIERRO-STEVENSON, M.D. and in support of their causes of action, respectfully show this Honorable Court the following:

**I.
INTRODUCTION AND SUMMARY OF THE CASE**

On August 29, 2019, David and Mariana Saucedo’s lives changed forever, when their three-year-old daughter, I.S., began to vomit. Within three days, I.S. suffered a stroke, quickly deteriorated, and then died at El Paso Children’s Hospital (“EPCH”), while supposedly under the care of Dr. Roberto Canales (“Dr. Canales”) and Dr. Rodolfo Fierro-Stevens (“Dr. Fierro-Stevens”).

This was no accident. I.S. died as a direct result of the grossly negligent care provided by EPCH, EPCH’s staff, and in particular, Dr. Roberto Canales.

Prior to her death, I.S. suffered from Hydrocephalus, commonly known as “water on the brain,” which is a neurological condition that occurs in about one out of every 500 births and develops in another 1 in 1,000 individuals following birth. Children with Hydrocephalus lead relatively normal lives, go to college, have successful careers, get married, and have children.

Hydrocephalus is caused when fluid gets trapped in the brain and cannot adequately circulate. Hydrocephalus is treated with a surgically implanted shunt, which drains excess fluids into the abdomen, where the fluids can be absorbed and discarded harmlessly. The shunt, however, must be monitored and replaced when necessary.

In the afternoon of August 29, 2019, I.S. began vomiting. Her mother called Dr. Canales’s medical clinic, Robert Canales, M.D., P.A., and obtained an appointment for 5:20 p.m. Upon arrival, I.S. and her mother were forced to wait several hours to be seen by Dr. Canales. By 8:34 p.m., Dr. Canales still had not diagnosed I.S.’s illness. He did, however, conclude that I.S. required emergency medical care. Dr. Canales instructed the Saucedos to take I.S. to the emergency room at EPCH. Dr. Canales promised he would follow them there and treat I.S. personally.

The Saucedos drove directly to the emergency room at EPCH and informed EPCH’s hospital staff of I.S.’s need for emergency medical treatment. After discovering that I.S. was a patient of Dr. Canales, hospital staff abruptly removed the Saucedos from the emergency room and placed them in a room on the 9th floor. Hospital staff explained to the Saucedos that Dr. Canales would arrive shortly and only he could treat I.S.

All night the Saucedos sat with I.S. in her room on the ninth floor waiting for Dr. Canales to arrive. Dr. Canales, however, never went to the hospital that night. All night I.S. received no treatment from EPCH’s on-call Emergency Room physicians or EPCH’s on-call Pediatric Intensive Care Unit (“PICU”).

This occurred because, as described more fully below, EPCH's doctors were instructed not to treat Dr. Canales's patients as a uniquely dangerous and unlawful accommodation for Dr. Canales. Without medical treatment, I.S.'s condition continued to worsen throughout the night, and she continued to vomit dark discharge in the holding room on the 9th floor.

Every hour on the hour, the Saucedos pleaded with EPCH staff to treat their daughter and repeatedly complained that her condition was deteriorating quickly. EPCH's staff ignored the Saucedos' pleas for help, and instead, assured the Saucedos that I.S. would be fine and that Dr. Canales would arrive shortly to provide treatment.

At 6:05 a.m. the next morning, on August 30, 2019, nurses indicated that Dr. Canales would arrive within the hour, which never occurred. At 8:15 a.m.—almost twelve hours after the Saucedos arrived at EPCH—I.S. went limp, turned blue, and began to foam from the mouth. The Saucedos pressed the emergency call button in an attempt to elicit immediate medical assistance. EPCH's emergency trauma team arrived and finally agreed to intervene and treat I.S., including sedating her in a comatose state immediately and transporting her to the Pediatric Intensive Care Unit ("PICU"). Dr. Canales did not arrive until shortly after 9:00 a.m.

With their daughter lying in a coma, Dr. Canales and Dr. Fierro-Stevens assured the Saucedos that they had no doubts that I.S. would soon "wake up" and they "would be ready to treat her." The Saucedos demanded a specific explanation why their daughter had coded and why her condition had deteriorated. Dr. Canales and other attending physicians provided no substantive information and misdiagnosed her condition as hypoxic shock and sudden death syndrome.

I.S.'s condition did not improve. She never woke up. Doctors confirmed she suffered a stroke. On August 31, 2019, doctors informed the Saucedos that their daughter, I.S., was "braindead." I.S. died on Monday, September 2, 2019 at 10:45 am.

This was no accident. It was also not a one-time medical malpractice event for Dr. Roberto Canales. Dr. Canales has been misdiagnosing and injuring children across El Paso for decades; he is a danger to the El Paso community, and he is unqualified and untrained in the area of Pediatric Intensive Care medicine.

I.S.'s death was also caused by EPCH's systematic and wide-spread policies and procedures that endangered its patients, like I.S., and were implemented by EPCH to accommodate and entice Dr. Canales to do business with EPCH in exchange for millions of dollars in revenue and massive amounts of patients promised to EPCH by Dr. Canales.

From the time EPCH began operations in 2012 until it hired Dr. Canales in early 2019, EPCH had lost millions of dollars in revenue each year, declared bankruptcy, and continued to lose millions of dollars each year after bankruptcy.

Unable to turn a profit, EPCH's administration turned to Dr. Canales—a doctor regarded by the El Paso community as a “miracle-worker,” who generated millions of dollars each year in revenue through reputation, an aggressive marketing campaign and large scale public health clinics with media exposure, allowing him to obtain a large patient roster.

Leading up to his hire in early 2019, EPCH approached Dr. Canales about referring his patients to EPCH. In return, EPCH promised to provide Dr. Canales with significant concessions and accommodations—accommodations that violated EPCH's bylaws, endangered EPCH's patients, and contributed to the death of I.S.

Specifically, when EPCH hired Dr. Canales, EPCH sought an exemption to allow Dr. Canales to practice Pediatric Intensive Care Medicine, even though he was untrained and unqualified in this practice area. Several EPCH medical directors and managing doctors refused to provide an exemption

and warned EPCH that Dr. Canales posed a danger to EPCH's patients without the necessary training and credentialing.

EPCH threatened these doctors with termination when they refused to sign the waiver, bypassed these doctors when they refused, and obtained the exemption anyways. EPCH went further and instructed its doctors to ignore Dr. Canales's deficient medical charts and refused to allow EPCH doctors to peer-review his work. EPCH administration also instructed its doctors that they were not allowed to treat Dr. Canales's patients in order to allow Dr. Canales the exclusive right to treat and bill his patients and their insurers.

It is no surprise that EPCH's physicians refused to treat I.S. when she presented to the ER at EPCH. Even worse, EPCH allowed a three-year-old girl in need of emergency care to suffer for almost twelve hours until she coded without any medical care in order to accommodate Dr. Canales.

II. **PARTIES**

Plaintiff DAVID EDWARD SAUCEDO, II is an individual residing in El Paso County, Texas. He is the father of deceased minor child, I.S. and husband of Plaintiff Mariana Saucedo. He brings this lawsuit on behalf of himself and I.S. The last three digits of his social security number are 414 and the last three digits of his Texas driver's license number are 527.

Plaintiff MARIANA TERRAZAS SAUCEDO is an individual residing in El Paso County, Texas. She is the mother of deceased minor child, I.S. and wife of Plaintiff Mariana Saucedo. She brings this lawsuit on behalf of herself and I.S. The last three digits of her social security number are 530 and the last three digits of her Texas driver's license number are 944.

Defendant EL PASO CHILDREN'S HOSPITAL CORPORATION is a domestic nonprofit corporation conducting business in El Paso, Texas and formed under Texas law. It may be served

via its registered agent at the law firm of Brown & Fortunato, P.C. located at 905 S. Fillmore, Suite 400, Amarillo, Texas 79101 or wherever it may be found.

Defendant DR. ROBERTO CANALES, M.D. is an individual residing in El Paso County, Texas. Dr. Canales may be served at his principal place of business at 1733 Curie Drive, Suite 103, El Paso, Texas 79902 or wherever he may be found.

Defendant DR. RODOLFO FIERRO-STEVENSON, M.D. is an individual residing in El Paso County, Texas. Dr. Fierro-Stevens may be served at his principal place of business at 1400 N. El Paso Street B, El Paso, Texas 79902 or wherever he may be found.

III.
DISCOVERY CONTROL PLAN

Pursuant to Texas Rule of Civil Procedure 190.1, Plaintiffs request that discovery be conducted under Level 3 of the Texas Rules of Civil Procedure and in the manner set forth by Texas Rule of Civil Procedure 190.4(a).

IV.
TEXAS RULE OF CIVIL PROCEDURE 47 STATEMENT OF RELIEF

In compliance with Texas Rule of Civil Procedure 47, Plaintiffs hereby give notice that they seek monetary relief in excess of \$1,000,000 and demand judgment for all other relief to which the Plaintiffs may deem themselves to be justly entitled. In compliance with Texas Civil Practice & Remedies Code § 74.053, this Petition does not specify an amount of money claimed as damages in this suit.

V.
JURISDICTION AND VENUE

This Court may exercise subject matter jurisdiction over this suit because the damages sought by Plaintiffs are within the jurisdictional limits of this Court under Texas Rule of Civil Procedure 47.

This case is not removal on the basis of diversity jurisdiction because all Defendants are Texas residents.

This Court has personal jurisdiction over Defendants because they transact business in this State and the causes of action herein arose from Defendants' activities in this state.

Venue is proper in El Paso County, Texas under Texas Civil Practice & Remedies Code § 15.002(a)(1) because all or a substantial part of the events or omissions giving rise to the claim occurred in El Paso County. In particular, I.S. died in El Paso County, Texas.

Venue is also proper in El Paso County, Texas under Texas Civil Practice & Remedies Code § 15.002(a)(2) because one or more defendants reside in El Paso, County and Defendants Dr. Canales's and Dr. Fierro-Steven's primary places of employment are located in El Paso County, Texas.

VI.
EXPERT REPORT REQUIREMENTS PURSUANT TO
TEXAS CIVIL PRACTICE AND REMEDIES CODE § 74.351

Pursuant to Texas Civil Practices and Remedies Code § 74.351, et al, Plaintiffs serve the following expert reports and curriculum vita on all three Defendants simultaneously with this Original Petition. This report is served in accordance with Section § 74.351 and does not constitute an expert report served in accordance with Texas Rule of Civil Procedure 194.2(f).

- (a) Expert report of Dr. Bradley Peterson, M.D., concerning Defendant Dr. Roberto Canales, M.D., attached hereto as Exhibit 1;
- (b) Expert report of Dr. Bradley Peterson, M.D., concerning Defendant El Paso Children's Hospital Corporation, attached hereto as Exhibit 2;
- (c) Expert report of Dr. Bradley Peterson, M.D., concerning Defendant Dr. Rodolfo Fierro-Stevens, M.D., attached hereto as Exhibit 3;
- (d) Curriculum Vitae of Dr. Bradley Peterson, M.D., attached hereto as Exhibit 4; and
- (e) Sworn affidavit of Dr. Tom Mayes, M.D., attached hereto as Exhibit 5.

VII.
STATUTORY COMPLIANCE

As required by Texas Civil Practice & Remedies Code 74.051(b), Plaintiffs provide notice that they have complied with Sections 74.051 and 74.052 of the Texas Civil Practice and Remedies Code by notifying Defendants of this claim for relief and opportunity to obtain necessary health information by certified mail return receipt requested and more than sixty (60) days has elapsed since Defendants receipt of said notice.

VIII.
FACTUAL BACKGROUND

A. In 2018, while facing millions in annual deficits and the possibility of closing, EPCH enlists the services of Dr. Canales.

EPCH began operations in February 2012. EPCH's website sets forth its mission as follows:

The Mission of [EPCH] is to provide compassionate, coordinated, family-centered care for children with a dedicated commitment to excellent patient outcomes, inclusive leadership, and innovative pediatric research and education.

To facilitate this Mission, EPCH implemented bylaws and industry-accepted policies to ensure that doctors providing emergency critical care at EPCH are trained and qualified to do so. These bylaws require, amongst other things, that all of its doctors be board certified in their practice field:

ARTICLE VIII — MEDICAL STAFF

8.1 Medical Staff. The Board shall appoint a Medical Staff for the Hospital composed of allopathic and osteopathic physicians, dentists, and podiatrists who are (a) holding or eligible for unlimited licenses to practice medicine in the State of Texas, (b) board certified or board eligible and (c) privileged to attend patients in the Hospital ("Medical Staff"). The Board may, from time to time and for good cause shown, make exception to the foregoing requirements.

EPCH's bylaws, requiring board-certification, are not ambiguous:

- c) Board certification or board certification eligibility in a recognized specialty and/or subspecialty as recognized by the American Board of Medical Specialties or from a Member Board of Certification of the Bureau of Osteopathic specialists or from the American Board of Podiatric Surgery if the applicant is a podiatrist or from the American Board of Oral / Maxillofacial Surgeons if the applicant is an oral surgeon or from the American Board of Dental Surgery if the applicant is a dentist. Details regarding board certification requirements may be set forth in policies adopted by the Medical Staff.

Likewise, EPCH internal policies require that all of its doctors be board certified in their respective fields:

BOARD CERTIFICATION

POLICY

It is the policy of the El Paso Children's Hospital that all applicants to the Medical Staff be board certified, in their chosen specialty, at the time of appointment. The board certification must be recognized by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOS).

In fact, EPCH's bylaws confirm that any request to apply to join EPCH's medical staff must be accompanied by proof of board certification:

4.5 APPLICATION FOR INITIAL APPOINTMENT AND REAPPOINTMENT

4.5.1 PRE-APPLICATION PROCESS FOR INITIAL APPOINTMENT

Upon receipt of a request to apply for Medical Staff Membership and Clinical Privileges, the Medical Staff Office shall screen the applicant practitioner before an application is sent. The applicant practitioner requesting Medical Staff Membership and Clinical Privileges shall be asked to supply documentation used to determine eligibility. The following information is required:

- a) Type of practitioner (e.g., physician, podiatrist, dentist);
- b) Appropriate educational and training credentials;
- c) Current appropriate license to practice in the State of Texas;
- d) Current controlled substance registration, if prescribing medications;
- e) Proof of professional liability insurance in the amount required by the Governing Body;
- f) National Provider Identifier Number (NPI); and
- g) Board Certification applicable to specialty.

Once proof of board certification is provided amongst other requirements, only then may a physician be permitted to apply for medical staff membership and/or clinical privileges. EPCH's

bylaws repeatedly confirm that board certification is an important basis for the granting of privileges at EPCH:

5.2.2 BASIS FOR PRIVILEGES DETERMINATION

Requests for Clinical Privileges shall be evaluated on the basis of the Medical Staff Member's education, training, board certification status, experience, demonstrated professional competence and judgment, clinical performance, and the documented results of patient care and other quality review and proctoring which the Medical Staff deems appropriate. Clinical Privilege determinations are to be based on demonstrated education and training and pertinent information concerning clinical performance obtained from other sources, especially other institutions and health care settings where a Medical Staff Member exercises Clinical Privileges. This information shall be added to and maintained in the Medical Staff file established for a Medical Staff Member.

To promulgate these policies and procedures, EPCH created a Medical Executive Committee responsible for overseeing and granting medical privileges to physicians whose training and qualifications comply with EPCH's bylaws:

4.11 MEDICAL EXECUTIVE COMMITTEE

At its regular meeting after receipt of the Credentials Committee recommendations, the Medical Executive Committee shall consider the application, recommendations, and any other relevant information. The Medical Executive Committee may request additional information, return the matter to the Credentials Committee for further investigation, and/or elect to interview the applicant practitioner or Practitioner. The Medical Executive Committee shall forward to the Board a written report with their recommendations as to Medical Staff appointment and, if appointment is recommended, as to Medical Staff Membership category, Department affiliation, Clinical Privileges to be granted, and any special conditions to be attached to the appointment. The MEC may also determine the application is not a Complete Application and return the application to the Medical Staff Office.

EPCH considers Board Certification and training so important that its bylaws require that a physician may even be terminated for cause for failure to maintain Board Certification in the physician's practice area:

8.5.5 REMOVAL

Any Department officer may be removed from office for cause. Removal shall occur with the majority vote of the Medical Executive Committee as to whether sufficient evidence exists for grounds for removal, with approval by a two-thirds (2/3) majority vote of the Medical Executive Committee and approval of the Board of Director. Grounds for removal may include any one or more of the following causes, without limitation:

- a) Failure to perform the duties of office;
- b) Failure to comply with or support the enforcement of these Bylaws or Rules/Regulations and Policies of the Medical Staff;
- c) Failure to support the compliance of the Hospital and the Medical Staff to applicable Federal and State laws and regulations, and the standards or other requirements of any regulatory or accrediting agency having jurisdiction over the Hospital or any of its services;
- d) Failure to maintain qualifications for office, specifically, failure to maintain Medical Staff status in good standing and/or failure to maintain specialty Board certification or comparable competence; or
- e) Failure to adhere to professional ethics or any other action(s) deemed injurious to the reputation of, or inconsistent with, the best interest of the Hospital or the Medical Staff.

These stringent bylaws are consistent with EPCH's proffered "core value" on its website entitled: "Excellence—We strive for excellence in quality, service, and leadership. We continuously learn and work to improve our skills, programs, and services."

In addition to tasking its Medical Executive Committee with reviewing the qualifications of current and incoming physicians, EPCH's Medical Executive Committee also oversees and implements a detailed peer-review system to hold doctors accountable while practicing their specialties at EPCH and to ensure the highest standards of care for patients admitted to EPCH. EPCH bylaws confirm that its peer review policy and procedures are not optional.

EPCH's policies and procedures are not unique to EPCH. Over the last thirty years, virtually every hospital in North America has adopted identical or similar standards to ensure the highest level of care.

Despite EPCH's good intentions, by 2015, EPCH declared bankruptcy after losing millions of dollars each year and owing various creditors more than \$100 million, including the University Medical Center and Texas Tech.

In 2016, EPCH restructured through bankruptcy, but in 2017, EPCH continued losing millions of dollars each year. County commissioners began to consider whether EPCH could continue to operate.

On or about September 27, 2017, EPCH promoted Cindy Stout to Chief Executive Officer ("CEO"). CEO Stout was responsible for changing policies and procedures at EPCH that placed profits over safety, and ultimately led to the death of I.S.

In 2019, EPCH was projected to lose more than four million dollars. Instead, EPCH generated over \$2.6 million in profits in 2019.

This occurred because, as described below, in late-2018, CEO Stout and EPCH administration began recruiting Dr. Canales—a prominent and popular local pediatrician—who in turn funneled millions in revenue to EPCH. Despite EPCH generating millions in profits through Dr. Canales, as shown below, these benefits came at a price, as Dr. Canales compromised the security of his patients and ultimately caused the death of the Saucedo's three-year-old daughter, I.S.

B. Dr. Canales owns a medical clinic called RCPA—an institution that places profits over patient care and contributed to the delay in medical treatment to I.S.

Dr. Roberto Canales has practiced medicine in El Paso, Texas for decades. Dr. Canales widely advertises himself as a highly successful medical doctor. His practice and extensive marketing earn him millions of dollars each year and allow him to maintain a large roster of patients.

In fact, it was an advertisement promoting Dr. Canales's clinic, Dr. Canales's reputation as a medical doctor, and numerous public awards and recognition posted on social media that caused the

Saucedos to seek treatment for I.S. from Dr. Canales in 2018. The Saucedos trusted Dr. Canales' reputation and his promise that he would provide their daughter with the very best care. This was uniquely important to the Saucedos, given I.S.'s medical condition.

To treat his patients, Dr. Canales runs a medical clinic called Robert Canales, M.D., P.A. ("RCPA"). Dr. Canales's clinic provides a wide-ranging medical practice, and Dr. Canales holds himself out as a "specialist" in the areas of General Pediatric Medicine, Pediatric Intensive Care Medicine, Hematology, and Oncology.

Despite these claimed specializations, Dr. Canales has received no formal board certifications, credentialing and/or fellowship training in Pediatric Intensive Care Medicine, Hematology, or Oncology—requirements mandated by virtually every medical credentialing board across the United States, including the American Board of Pediatrics ("ABP") and Pediatric Critical Care Medicine Board ("PCCM").

Put plainly, he is unqualified, untrained, and lacks the credentialing requirements to practice as a pediatric intensive specialist, Hematologist, or Oncologist—despite holding himself out as a "specialist" in these areas. Without this training, it is widely accepted that he cannot hold himself out as a "specialist" in Pediatric Intensive Care Medicine, Hematology, and Oncology.

Practicing medicine across four specialized practice areas, however, can be a lucrative business. The more patients Dr. Canales treats, the more revenue and patients he can obtain for his medical clinic and himself. Thus, practicing numerous areas of medicine, even though Dr. Canales is unqualified to do so, results in higher profits.

Dr. Canales frequently treats in excess of 100 to 200 patients per day at RCPA. This virtually impossible feat is achieved by spending only a few minutes at most with the overwhelming majority of his patients, while delegating the responsibility to complete his notes and medical charts to

assistants and/or nurse practitioners, typically well after the patient has left the office. Dr. Canales will frequently sign off on these records at much later dates.

In essence, Dr. Canales “pencil-whips” his medical records, meaning he frequently completes medical records without a corresponding examination and/or completes medical records that are inconsistent with his physical examination.

RCPA’s business model is income-driven and not patient-driven. RCPA’s business model is dangerous, unethical and unlawful. RCPA’s goal is to create an environment where Dr. Canales can visit as many patients as possible so that RCPA can bill the patient’s insurer, Medicare, and/or Medicaid.

RCPA’s profit-centered environment led to I.S. waiting at RCPA for hours before she was treated for just a few minutes by Dr. Canales on August 29, 2019. In other words, RCPA’s institutional business practice of placing profits over patient care directly caused the worsening and delay in treatment to I.S. on August 29, 2019.

C. In 2019, EPCH hires Dr. Canales and begins violating its bylaws to satisfy and accommodate Dr. Canales’s demands.

In conjunction with his clinic, Dr. Canales has worked for several hospitals in the El Paso-area over the previous decades. Hospitals that hire and maintain a relationship with Dr. Canales obtain significant income when Dr. Canales refers his patients to their emergency rooms.

In 2018, EPCH and Dr. Canales reached an agreement where Dr. Canales would begin referring his patients to EPCH, and EPCH would in turn pay Dr. Canales handsomely, provide him with significant accommodations, and change its policies to allow him the exclusive right to treat and bill his patients.

On or about April 1, 2018, EPCH also hired Dr. Tom Mayes to Chair its Department of Pediatrics. Dr. Mayes is a well-respected medical doctor and professor, who has practiced pediatric intensive care medicine and taught and managed at various medical schools in Texas with distinction for almost 30 years. One of Dr. Mayes's tasks was to ensure that physicians at EPCH were qualified to practice medicine in compliance with EPCH's bylaws. This means that EPCH tasked Dr. Mayes with ensuring that its doctors were trained, certified, and qualified to practice critical care medicine at EPCH.

On or about October 17, 2018, Dr. Canales applied for medical staff privileges at EPCH. In submitting his application, Dr. Canales requested credentials at EPCH to practice in the areas of General Pediatric Medicine, Pediatric Intensive Care Medicine, Hematology, and Oncology. Most importantly and in order for EPCH and Dr. Canales's relationship to be mutually beneficial, Dr. Canales needed credentialing authority to practice Pediatric Critical Care before treating his patients admitted to EPCH's emergency room and pediatric intensive care unit ("PICU").

Dr. Mayes discovered, however, that Dr. Canales lacked formal training and was not board certified in Pediatric Critical Care Medicine, Oncology, or Hematology. In the past, Dr. Mayes had been forced to terminate numerous physicians who were unable to achieve board certification in their specialized fields.

Upon reviewing Dr. Canales's application for medical staff privileges, Dr. Mayes concluded that Dr. Canales was unqualified to practice in these areas and posed a significant risk of injury to EPCH patients should he be allowed to practice Pediatric Critical Care Medicine, Hematology, and Oncology. Dr. Mayes further concluded that Dr. Canales' request violated EPCH's bylaws, policies and procedures.

Dr. Mayes refused to sign off on Dr. Canales’s application for medical privileges in the areas of Pediatric Intensive Care Medicine, Oncology, and Hematology. Dr. Mayes did sign off on Dr. Canales’s request to practice General Pediatric Medicine as Dr. Canales did “technically” hold board certification even though his certification had been “grand-fathered” in to his board certification in 1985, under the former archaic system.

Dr. Mayes’s refusal to endorse privileges for Dr. Canales in the area of Pediatric Critical Care Medicine posed a serious problem to EPCH and Dr. Canales, who needed Dr. Mayes to approve privileges before Dr. Canales could begin to refer his patients to EPCH and then treat them as a Pediatric Intensivist once they were admitted to EPCH.

When EPCH administration discovered Dr. Mayes’s refusal to approve Dr. Canales’s application to practice Pediatric Critical Care Medicine, EPCH deployed senior hospital administrator Ms. Melissa Padilla—an administrator who reported directly to EPCH CEO Cindy Stout—to obtain a waiver from Dr. Mayes.

Ms. Padilla requested a meeting with Dr. Mayes and another doctor, who chaired EPCH’s Credentialing Committee. During this meeting, Ms. Padilla presented Dr. Mayes with some forms to sign relating to Dr. Canales. Upon careful review, Dr. Mayes discovered that one of the forms was a waiver to allow Dr. Canales to practice Pediatric Critical Care Medicine despite his lack of training and qualifications—the same privileges Dr. Mayes previously refused to endorse. Dr. Mayes refused to sign the waiver.

A short time later, EPCH CEO, Cindy Stout, arrived to discuss the matter with Dr. Mayes. CEO Stout attempted to “brow beat” Dr. Mayes into allowing Dr. Canales to practice as a Pediatric Intensivist in EPCH’s ER and PICU. She explained at length that EPCH needed Dr. Canales’ inpatient volume and associated revenue for the hospital because of EPCH’s dire financial circumstances. She

also explained at length the revenue Dr. Canales could generate for EPCH. Dr. Mayes again refused and explained at length that Dr. Canales was unqualified and posed a risk to EPCH patients should he be allowed to practice as a Pediatric Intensivist.

Over the next several weeks, CEO Stout repeatedly sought to coerce Dr. Mayes into approving Dr. Canales' application for medical privileges. Each time, Dr. Mayes explained the serious risk Dr. Canales posed to EPCH patients should he be allowed to practice in a field for which he was untrained and unqualified.

EPCH administration also requested that Dr. Prashant Joshi, EPCH's PICU Medical Director, sign off on an exemption for Dr. Canales to practice Pediatric Critical Care Medicine. After reviewing Dr. Canales's application and credentialing, he too refused to do so.

EPCH knew Dr. Canales was untrained and unqualified to practice pediatric critical care medicine and knew that its leading medical doctors and directors were repeatedly raising concerns that Dr. Canales posed a significant threat to EPCH patients should he be allowed to practice as a Pediatric Intensivist. EPCH ignores these complaints, bypassed its PICU Medical Director and Chair of its Pediatric Department, and obtained approval over their rigorous objections.

In early 2019, Dr. Canales began admitting patients to EPCH. Dr. Canales was the only doctor practicing in EPCH's PICU without any training or board certification credentialing.

As revenues began to increase dramatically in 2019, EPCH began to push its hospital staff further to accommodate Dr. Canales. In late 2019, Cindy Stout notified EPCH's staff that Dr. Canales would not be subject to EPCH's required peer review process, required in its bylaws. Instead, CEO Stout confirmed that Dr. Canales would grade his own work without any accountability from his peers. CEO Stout explained her reasoning—that doctors likely would not be fair in assessing the quality of Dr. Canales's work after opposing his medical credentials.

CEO Stout went further and prohibited EPCH's ER and PICU medical directors and physicians from reviewing Dr. Canales's inpatient charts. When managing doctors questioned this policy, CEO Stout threatened to fire them and reminded them that they served in their positions at her bidding.

EPCH administration did not stop there. EPCH implemented bolder policy changes to accommodate Dr. Canales and his massive influx of patients. In 2019, EPCH, under CEO Stout's leadership, instituted policies to circumvent long-standing processes for the transport of patients to EPCH from outside the facility, admission policies such that Dr. Canales could claim "ownership" of patients admitted to other practitioners providing a separate admissions pathway through the nursing administrative office. This would, in turn, generate significant revenue to Dr. Canales personally while ensuring EPCH continued to receive Dr. Canales's patient referrals.

EPCH administration instructed PICU doctors and medical staff personnel not to treat Dr. Canales' patients. This meant that at times when urgent patient concerns arose in EPCH's PICU, physicians were forced to respond to staff calls for assistance by saying "this is not our patient" and "we can't help them." This put the children admitted to the PICU in immediate danger and risk.

This policy also caused, in part, the death of three-year-old I.S., who was admitted to the emergency room around 9:00 p.m. on August 29, 2019, but was removed from the emergency room and left in a room on another floor for almost twelve hours waiting for Dr. Canales to arrive to treat her without any medical care from an on-call physician.

On or about December 3, 2019, EPCH promoted Dr. Canales to Chief Clinical Officer of EPCH, a title that carried no additional responsibilities but provided him a seat at EPCH's executive table.

Beginning in late 2019, EPCH's doctors met with Cindy Stout and addressed concerns about Dr. Canales' treatment, qualifications, and EPCH's changing procedures. EPCH physicians informed Cindy Stout that Dr. Canales was refusing to engage in peer review, was prescribing orders by telephone, which is not allowed, and was not signing his medical charts.

Cindy Stout and hospital administration ignored these warnings and continued to accommodate Dr. Canales for the sole purpose of generating millions of dollars in revenue for EPCH.

D. On August 29, 2019, I.S.'s shunt malfunctions, requiring immediate medical care.

I.S. was born in 2016. When doctors diagnosed I.S. with Hydrocephalus, the Saucedos sought out the best medical doctors in the world to install her VP shunt. This successful surgery was done by Dr. Fred Sklar, a world-renowned pediatric neurosurgeon from the University of Texas Southwestern Pediatric Neurosurgery Group at Dallas Children's Hospital.

In 2018, the Saucedos discussed allowing Dr. Canales to treat I.S.'s condition locally at his clinic, RCPA, given his reputation. As described above, their then-two-year-old daughter I.S. suffered from Hydrocephalus, and the Saucedos were optimistic that Dr. Canales would provide the very best medical care to I.S.

On August 29, 2019, at 3:33 p.m., I.S. began vomiting. Her mother, Mrs. Saucedo, called RCPA and obtained an appointment with Dr. Canales at 5:20 p.m. I.S. and her mother arrived for the appointment promptly, but RCPA staff forced the Saucedos to wait for several hours before receiving treatment. By 8:34 p.m., Dr. Canales finally saw and examined I.S. and requested the Saucedos immediately take I.S. to the emergency room at El Paso Children's Hospital ("EPCH"). Dr. Canales promised he would promptly follow them there and treat I.S. personally.

As a result of the arrangement between EPCH and Dr. Canales described above, when the Saucedos arrived at EPCH, hospital staff removed the Saucedos from the emergency room and placed

the Saucedos in a room on the 9th floor, in anticipation of Dr. Canales's arrival. Despite promising to meet them at the hospital immediately, Dr. Canales never went to EPCH that night.

For almost twelve hours, the Saucedos sat in a room on the ninth floor, waiting for a doctor that would never arrive. I.S. continued to suffer, and began to deteriorate throughout the night as she waited for Dr. Canales, and finally, hours later, a hospital nurse started an IV on I.S.

All night the Saucedos sat with I.S. in her room on the 9th floor receiving no treatment from a doctor, while I.S. continued to vomit dark discharge over and over. The Saucedos pleaded with hospital staff to treat their daughter and repeatedly complained that her condition was deteriorating quickly. EPCH's staff ignored their warnings and complaints, and assured them Dr. Canales would arrive shortly to treat I.S.

At 6:05 a.m., EPCH nurses told the Saucedos that Dr. Canales would arrive within the hour. Dr. Canales did not arrive within the hour. By 8:15 a.m., I.S. went limp, turned blue, and began to foam at the mouth. Only after the Saucedos called for help by pressing the emergency call button did EPCH's PICU rapid response team arrive around 8:15 a.m. and agree to treat I.S.

Despite I.S.'s coma, after his arrival, Dr. Canales assured the Saucedos that I.S. would "wake up" and he would be ready to treat her. Dr. Canales also sought a second opinion from Defendant Dr. Fierro-Stevens, EPCH's on-duty neurologist, but Dr. Fierro-Stevens failed to diagnosis that I.S.'s shunt was malfunctioning and that I.S. had increased pressure on her brain.

Dr. Canales made plans to order an EEG before ordering a CT scan, but fearing for I.S.'s life and understanding her medical history, her parents intervened and demanded that Dr. Canales conduct the CT scan first. EPCH staff did not, however, perform the CT scan until 7:24 p.m. on August 30th.

Despite the CT Scan indicating cerebral swelling and potential brain damage, Dr. Canales, Dr. Stevens, and other EPCH personnel misdiagnosed I.S. and failed to consider slit ventricle

syndrome, a commonly known complication of ventriculoperitoneal shunt placement and Hydrocephalus.

Instead, EPCH staff concluded that I.S. had developed diabetes insipidus, and Dr. Canales diagnosed I.S. with hypoxic stroke—a clear misdiagnosis. These misdiagnoses resulted in I.S.’s inability to receive life-saving treatment.

On September 1, 2019, EPCH Dr. Fierro-Stevens formally declared I.S. “brain-dead.” It took Dr. Canales another day to declare I.S. brain-dead on September 2, 2019. He then left I.S. in the care of other physicians and left the hospital. Dr. Canales never returned to the hospital to treat I.S. or follow-up with the Saucedos.

I.S. died on Monday, September 2, 2019 at 10:45 a.m. Her death was completely unnecessary and was a result of these Defendants’ malfeasance and maliciousness.

E. EPCH refuses to turn over damaging medical records to the Saucedos following I.S.’s death.

Two days after I.S. died, on September 4, 2019, Mr. Saucedo submitted a formal written request for all of I.S.’s medical records. Federal law required EPCH to assemble and produce immediately to the Saucedos all of I.S.’s medical records.

Instead of doing so, EPCH assembled and produced only some of I.S.’s medical records, retaining some of the more damaging medical records that made these Defendants look very bad. EPCH assured the Saucedos that it had fully produced all of their daughter’s medical records. But that assertion was false.

In examining the medical records, the Saucedos discovered that EPCH had not only failed to turn over certain documents, but had withheld the most damaging documents, including radiology

reports, CT Scan records, and other various records evidencing that EPCH misdiagnosed I.S. and had sufficient evidence prior to her death showing elevated pressure on her brain.

On March 10, 2020, the Saucedos formally filed a complaint against EPCH through the United States Department of Health and Human Services and the Office of Civil Rights. The United States Department of Health and Human Services began an investigation into the complaint. On or about May 1, 2020, investigators notified EPCH that they had commenced an investigation to determine whether EPCH had unlawfully withheld I.S.'s medical records.

On May 29, 2020—almost nine months after I.S. died at the hands of Dr. Canales and the Defendants—EPCH issued a letter to the Saucedos. In the letter, signed by EPCH's Manager of Health Information Management Stephanie Hubbard, EPCH admitted the Saucedo's complaint was valid, and EPCH had indeed withheld critically important medical records requested by the Saucedos after the death of their daughter. The letter states in part:

The hospital has completed a thorough investigation into this matter. We found your concern to be valid. On September 4, 2019, you submitted a written request for the medical records of your child. On September 5, 2019, the hospital mailed 781 pages of material to you. At the time the response was sent, the hospital believed that all records available were provided to you. However, we have now confirmed that the report related to the CT scan was not included in the records mailed to you. Moreover, we have discovered that all reports of radiologic/imaging services were erroneously excluded from the original release of records.

Ms. Hubbard rationalized that EPCH's mistake could be explained as nothing more than a "computer systems error," that has since been corrected by her team. Such is bunk, and untrue, and hurtful to the Saucedos, who lost their daughter unnecessarily at the hands of Dr. Canales.

The truth is that EPCH's and Dr. Canales's "medical care" killed I.S., and then after her death, EPCH attempted to withhold damaging medical records, including radiology and CT scan records, showing that their daughter died from intercranial pressure and not EPCH's pre-death diagnosis.

I.S.'s death was no accident. Plaintiffs bring this suit to ensure these events never occur again at EPCH.

IX. **CAUSES OF ACTION**

Plaintiffs incorporate the above paragraphs as if set forth in full below.

A. Negligence (All Defendants)

Defendants owed I.S. the duty to exercise a degree of care, skill, supervision, and diligence ordinarily possessed and used by nurses, physicians, and providers under the same or similar circumstances.

Defendants, including their nurses, physicians, agents, employees, and administrators violated the duty of care they owed to I.S. Their actions were willfully and wantonly negligent in the following respects:

- (a) Failing to properly staff its facilities with appropriately qualified and experienced physicians;
- (b) Failing to ensure that I.S.'s treating physicians at EPCH were trained, qualified, and Board Certified in Pediatric Critical Care medicine;
- (c) Ignoring warnings and concerns voiced by head medical physicians at EPCH about Dr. Canales' qualifications and training;
- (d) Violating EPCH bylaws by failing to require Dr. Roberto Canales, M.D. to comply with credentialing requirements set forth in EPCH's bylaws;
- (e) Failing to adequately credential Dr. Roberto Canales, M.D.;
- (f) Failing to provide basic emergency room care in a timely manner;
- (g) Failing to provide emergency medical care in good faith as set forth in Tex. Civ. Prac. & Rem. Code § 74.151, *et al*
- (h) Failing to provide any medical treatment to I.S. for almost 12 hours;
- (i) Failing to provide timely medical assistance;
- (j) Failing to appreciate I.S.'s condition;

- (k) Failing to review and/or consider I.S.'s medical history in diagnosing I.S.'s condition;
- (l) Failing to review and/or consider I.S.'s medical history while treating I.S. at Robert Canales, P.A.;
- (m) Failing to review and/or consider I.S.'s medical history while treating I.S. at EPCH;
- (n) Failing to properly evaluate the condition of I.S., when she presented to Defendants;
- (o) Failing to properly treat the condition of I.S. when she presented to Defendants;
- (p) Misdiagnosing I.S.'s medical condition numerous times;
- (q) Failing to institute the chain of command when it became apparent that Defendants and treating physicians did not appreciate and treat the immediate distress suffered by I.S.;
- (r) Implementing policy(s) and procedure(s) that precluded EPCH's medical doctors from providing emergency critical care to I.S. when she presented at EPCH;
- (s) Implementing policy(s) and procedure(s) that allowed Dr. Roberto Canales to practice critical care medicine without any peer review;
- (t) Implementing policy(s) and procedure(s) by EPCH that created an unsafe environment that compromised the standards of care owed to I.S.;
- (u) Violating the standards of care shown in Dr. Peterson's attached declaration, of which such violations are fully incorporated as though fully set forth herein; and
- (v) Implementing policies and procedures at EPCH that placed profits over safety.

Each and every aforementioned act or omission, singularly and severally, constitute negligence on the part of Defendants, which was a direct and proximate cause of the death of I.S., as well as the injuries and damages sustained by Plaintiffs.

B. Agency / Master-Servant / Respondeat Superior (EPCH)

Any and all acts or omissions constituting negligence and/or malpractice by Dr. Canales, any attending nurses and other physicians of EPCH and RCPA are imputed to EPCH and RCPA under theories of master-servant relationship, principal agent relationship, other agency theories, and/or *respondeat superior*.

C. Gross Negligence (All Defendants)

The above cited acts and/or omissions by Defendants amount to gross negligence because, when viewed objectively from Defendants' standpoint at the time in question, such acts and/or omission involved an extreme degree of risk, considering the probability and magnitude of potential harm, of which Defendants had actual, subjective awareness of the risk involved, but nevertheless proceeded with conscious indifference and/or malice with regard to the rights, safety, or welfare of I.S. and others. For gross negligence, Plaintiffs seek exemplary damages, in addition to economic and noneconomic damages, in an amount within the jurisdictional limits of this Court.

D. Willful and Wanton Conduct (All Defendants)

The above cited acts and/or omission by Defendants amount to more than momentary thoughtlessness, inadvertence, or error in judgment. The actions and/or omission were of such want of care as to establish that the acts and/or omission complained of were the result of actual conscious indifference to the rights, safety, and welfare of I.S. and persons affected by them.

**X.
DAMAGES**

As a direct and proximate result of the negligent acts and/or omission of the Defendants as set forth above, I.S. suffered severe and permanent physical injuries, emotional injuries and death. Plaintiffs seek recovery for past medical expenses, including funeral and burial expenses, physical pain and mental anguish and loss of love, companionship, and enjoyment of their daughter, I.S.

As a direct and proximate result of the negligent acts and/or omissions of Defendants as set out above, Plaintiff Mr. David Saucedo, as the biological father of I.S., deceased, has suffered damages of a pecuniary nature, including reasonable and necessary medical expenses incurred in the care and treatment of himself. Mr. Saucedo has also incurred the loss of other services of a pecuniary

nature reasonably expected from a child up and until the age of majority, and any contributions of a monetary value a parent might reasonably expect to receive from her child after the child reaches the age of majority. Mr. Saucedo has also suffered in the past, and reasonably expects to continue suffering in the future mental anguish and loss of companionship and society. Mr. Saucedo seeks to recover all personal injury damages available to him under the Texas Wrongful Death Statute within the jurisdictional limits of this court.

As a direct and proximate result of the negligent acts and/or omissions of Defendants as set out above, Plaintiff Mrs. Mariana Saucedo, as the biological mother of I.S., deceased, has suffered damages of a pecuniary nature, including reasonable and necessary medical expenses incurred in the care and treatment of herself. Mrs. Saucedo has also incurred the loss of other services of a pecuniary nature reasonably expected from a child up and until the age of majority, and any contributions of a monetary value a parent might reasonably expect to receive from her child after the child reaches the age of majority. Mrs. Saucedo has also suffered in the past, and reasonably expects to continue suffering in the future mental anguish and loss of companionship and society. Mrs. Saucedo seeks to recover all personal injury damages available to her under the Texas Wrongful Death Statute within the jurisdictional limits of this court.

Plaintiffs seek punitive and exemplary damages to which they are entitled.

All of the above have resulted in damages which are within the jurisdictional limits of this Court, for which Plaintiffs now plead against Defendants.

XI.
DEMAND FOR JURY TRIAL

Plaintiffs respectfully demand a jury trial and tenders the appropriate fee with this petition.

XII.
CONDITIONS PRECEDENT

All conditions precedent to Plaintiffs' right to recover have been fully performed, or have been waived by Defendants.

XIII.
REQUESTS FOR DISCLOSURE

Pursuant to Tex. R. Civ. P. 194, Plaintiffs request that each Defendant disclose within fifty (50) days of service of these Requests for Disclosure, the information and/or material described in Rule 194.2.

XII.
PRESERVATION OF EVIDENCE

Plaintiffs hereby request and demand that each Defendant, including its officers, administration, employees, agents, associates, and third-party administrators, preserve and maintain all evidence pertaining to any claim or defense related to the incident made the basis of this lawsuit or the damages resulting therefrom, including statements, photographs, videotapes, audiotapes, surveillance or security tapes, business or medical records, incident reports, bills, telephone call slips or records, correspondence, facsimiles, emails, voicemails, text messages, policies, contracts, agreements of any kind, procedures, bylaws, and any evidence involving any facts stated in this petition and the incident in question, and any electronic image or information related to the referenced incident or damages. Failure to maintain such items will constitute "spoliation" of the evidence.

PRAYER

Plaintiffs pray that Defendants be cited to appear and answer herein, and that upon final determination of these causes of action, Plaintiffs receive a judgment against Defendants, awarding Plaintiffs as follows:

- (a) Actual damages as alleged herein, in an amount within the jurisdictional limits of the Court, to be determined by a jury;
- (b) Exemplary damages in an amount within the jurisdictional limits of the Court, in an amount to be determined by a jury;
- (c) Costs of court;
- (d) Prejudgment interest at the highest rate allowed by law from the earliest time allowed by law;
- (e) Interest on the judgment at the highest rate from the date of judgment until collected; and
- (f) All such other and further relief at law and in equity to which the Plaintiffs may show themselves to be justly entitled.

Respectfully submitted,

THE BUZBEE LAW FIRM

By: /s/ Anthony G. Buzbee
Anthony G. Buzbee
State Bar No. 24001820
tbuzbee@txattorneys.com
David L. Bergen
State Bar No. 24097371
dbergen@txattorneys.com
J.P. Morgan Chase Tower
600 Travis, Suite 7300
Houston, Texas 77002
Telephone: (713) 223-5393
Facsimile: (713) 223-5909
www.txattorneys.com

ATTORNEYS FOR PLAINTIFFS

SWORN DECLARATION AND REPORT OF DR. BRADLEY PETERSON
REGARDING DR. ROBERTO CANALES, M.D.

1. My name is Dr. Bradley Peterson, my date of birth is March 9, 1944, and my address is 3020 Children's Way MC #5065, San Diego, California 92123.

2. I am over the age of 18, and have never been convicted of a felony or a crime involving moral turpitude. I am fully competent to make this affidavit and have personal knowledge of the facts stated herein and they are true and correct. The facts and opinions recited below are based on facts which experts in my field reasonably and traditionally rely.

3. On February 28, 2020, The Buzbee Law Firm contacted me to review the medical records of a deceased three-year-old girl named I.S. and render an opinion on the care she received by El Paso Children's Hospital and the attending medical professionals. I was then hired to prepare expert reports that summarize my opinions in compliance with certain medical malpractice reporting requirements that must be produced to a defendant within a certain period of time. These opinions are subject to change to the extent I review additional documentation produced during the course of litigation.

4. The following work summarizes my opinions, research, review, experience and qualifications below. My experience, training, qualifications, research, and review of pertinent medical records form the basis of my opinions in this report in addition to any other information described in this report.

5. My attached curriculum vitae is a true and accurate representation of my education, training and experience. All of my opinions are based upon a reasonable degree of professional certainty within my field of expertise, Pediatric Critical Care. My attached curriculum vitae is fully incorporated in this report and forms a sound foundation for my opinions in this report.

6. Summarily, as set forth in greater detail below, Dr. Canales, Dr. Stevens, El Paso Children's hospital staff and attending physicians and administration repeatedly violated the standards of care relating to I.S. 's ("patient") treatment and such violations without question caused the death of the patient. Each opinion rendered in this declaration is based on my experience, qualifications, education listed below along with my review of the documents provided by the Buzbee Law Firm.

Relevant Education, Training, and Awards

A. Training and Qualifications

7. I attend medical school at Northwestern Medical School in Chicago, Illinois. I graduated in 1970.

8. I completed a residency in Pediatrics at the University of Minnesota and at United States Balboa Naval Hospital From 1970-1973. I completed training in Neonatology at Rady Children's Hospital in San Diego, California from 1973-1975. From 1975-1977, I completed a residency at Stanford University in Anesthesiology.

9. From 1972-1973, I served in the military at the United States Naval Hospital in San Diego, California as a Staff Pediatrician.

10. In 1976, I obtained board certification in Pediatrics by the American Board of Pediatrics. In 1981, I became board certified in Anesthesiology with the American Board of Anesthesiology. In 1987, 1994, 2002, 2012, and 2020, I obtained and renewed my board certification in Pediatric Critical Care. I also have obtained certifications in PALS, ACS, and as an ATLS Instructor.

11. I have held various roles and positions throughout my career that are relevant to my opinion in this case.

12. From 2017-2020, I served as a Senior Consultant to RCHSD PICU.

13. From 1977-2014, I served as a Medical Director of Pediatric Critical Care at Rady Children's Hospital in San Diego, California.

14. From 1977-2017, I served as the Director of RCHSD's Pediatric Critical Care Fellowship Program.

15. From 1978-2020, I served as Medical Director of RCHSD's Pediatric Transport Team.

16. I have also worked as a Senior Staff member of RCHSD's Pediatric Critical Care and Anesthesiology programs and as Associated Professor of Pediatrics, Anesthesiology, and Surgery at University of California San Diego.

17. From 1978-2019, I chaired RCHSD's PICU Morbidity and Mortality Conference.

18. From 1978-2019, I chaired RCHSD's Transport Morbidity and Mortality Conference.

19. From 1984-2004, I Co-Chaired the Trauma Morbidity and Mortality Conference.

20. I have also served as a reviewer for the Journal of Pediatric Critical Care Medicine.

21. I have received various honors and awards for my work in the areas cited above.

22. I have been awarded from the University of California San Diego for outstanding teaching in the area of Pediatric Critical Care.

23. In 1989, I received the award for outstanding clinical research for Medicine, Surgery, Anesthesiology, Pediatrics at the National SCCM Conference.

24. In 1996, I received an award for outstanding work in Pediatric Critical Care for a paper presented at the SCCM Conference.

25. I received an Outstanding Contribution to Emergency Care award in 1996 from the San Diego County Medical Society.

26. In 1998, I was awarded an Educational Scholarship Award at the SCCM Conference.

27. I have been acknowledged as one of San Diego's "Top Doctors" in 2006, 2007, 2008, 2009, 2010, 2012, 2017.

28. In 2010, RCHSD presented me with an award for outstanding clinical care.

29. In 2012, I received an award for exceptional results for the Pediatric Critical Care Unit recognizing that our outcomes regarding survival and mortality were several standard deviations above the mean over a period of 15 years.

30. In 2016, The University of California San Diego Pediatric Critical Care Fellowship was named in my honor "The Bradley Peterson Pediatric Critical Care Fellowship."

31. In 2014, our Pediatric Life Flight Helicopter was inscribed "Caring for the future with wisdom and guidance from our mentor and friend." Bradley Peterson, M.D. MD.

32. I have been admitted as a member into the following societies and committees: the Fellow, American College of Critical Care Medicine; American Society of Anesthesiology; California Society of Anesthesiologists; American Medical Society; Fellow, American Academy of Pediatrics; San Diego County Medical Society; Society of Critical Care Medicine; Southern California PICU Network; Education Committee, Southern California PICU Network; Society for Pediatric Trauma; American Academy of Pediatrics-Transport Medicine Section; Pediatric Critical Care Colloquium Steering Committee; and Society for Pediatric Trauma; American Academy of Pediatrics—Transport Medicine.

33. I currently practice medicine as a Board Certified, practicing as an attending Pediatric Critical Care physician for 43 years as set forth in my CV.

B. Personal Publications and Presentations Applicable to this Case

34. I have authored numerous medical articles, papers, and various publications during my career in the area of Pediatric Critical Care Medicine. I have also presented at numerous conferences and events across the United States and the globe, highlighting my work and medical analysis in the field of Pediatric Critical Care Medicine.

35. My curriculum vitae, attached to this report, fully details these papers and presentations.

36. I have also authored various research publications and articles and given various presentations on issues directly relevant to my analysis of the patient in this case. Each of the foregoing publications and presentations are incorporated in this declaration as though fully set forth herein. My relevant papers include the following:

- Fisher B, Thomas D, and Peterson B: Hypertonic saline lowers raised intracranial pressure in children after head trauma. Journal of Neurosurgical Anesthesiology Vol. 4(1): 4-10. Jan 1992;

- Peterson B and Khanna S: Prolonged hypernatremia controls elevated intracranial pressure in head injured patients. *Critical Care Medicine*, 28(4): 1136-43, Apr 2000;
- Khanna S, David D, Peterson B and Fisher B: Use of hypertonic saline (3% NaCl) in treatment of severe refractory post traumatic intracranial hypertension in pediatric traumatic brain injury. *Critical Care Medicine*, 28(4): 1144-51, Apr 2000; and
- Gonda DD, Meltzer HS, Crawford JR, Hilfiker ML, Shellington DK, Peterson BM, Levy ML: Complications associated with prolonged hypertonic saline therapy in children with elevated intracranial pressure. *Pediatric Critical Care Medicine*. 2013; 14(6): 610-620.

37. My relevant abstracts include the following:

- Peterson B, Waltz T, et al: Use of hypertonic saline in the management of severe pediatric brain injury. *Journal of Emergency Medicine*, Jun 1988;
- Fisher B and Peterson B: Prospective study utilizing hypertonic saline to control raised intracranial pressure in children after head trauma. The National Conference of Pediatric Trauma, Ann Arbor, Michigan, Sep 1989;
- Stephanopoulos D, Peterson B: Atrial natriuretic factor release in pediatric head injury patients causing clinically significant hyponatremia. Seventh Pediatric Critical Care Colloquium. Seattle, Washington, Oct 26-29, 1994;
- Fagan M, James HE, and Peterson B: Results of intracranial pressure monitoring: A clinical report on methods employed in the 1996 year and future projections. (Poster presentation at the Tenth Annual Pediatric Critical Care Colloquium, Hot Springs, Arkansas, Sep 1997);
- Khanna S, Fisher B, Peterson B: Prolonged Hypernatremia Safely Controls Elevated Intracranial Pressure in Pediatric Head Injury Patients. (Poster presentation at the Society of Critical Care Medicine, 27th Educational and Science Symposium, San Antonio, Texas, Feb 2-8, 1998);
- Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3%NaCl) in the Treatment of Resistant intracranial Hypertension in Pediatric Head Injured Patients. (Oral presentation to the Section of Critical Care of the American Academy of Pediatrics, San Francisco, CA Oct 1998);
- Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3% NaCl) in the Treatment of Severe Refractory Post Traumatic Intracranial Hypertension in Pediatric Head Injured Patients. (Poster presentation at the Society of Critical Care Medicine, San Francisco, CA Jan 1999). Paper received 1998 Scholarship Award.

- Parsapour K, Fathi A, Rafaat K, and Peterson B: 3% Hypertonic saline may improve concussive symptoms: (Oral presentation at the 16th Pediatric Critical Care Colloquim, Snowbird, Utah Feb 2006) Pediatric Critical Care Medicine. Abstract Translations 7(5): 514, S

I have authored various book chapters, including the following that are relevant to my analysis in this declaration:

- Peterson B, Duthie S: Chapter 248 – Pediatric Trauma, Textbook Critical Care, 5th Edition. Edited by Fink, et al. 2005;
- Peterson B, Duthie S: Pediatric Trauma. In JL Vincent, et al (Eds.) Textbook of Critical Care, 6th Edition (Chapter 210, pp 1529-1542). Philadelphia

38. I have also presented numerous presentations at National and International medical conferences that were relied upon and relevant to my declaration in this case, including:

- National Conference on Pediatric Trauma: Use of Hypertonic Saline in the Management of Severe Pediatric Brain Injury. Boston, MA Sep 1987;
- National Pediatric Critical Care Nursing Conference: San Diego, CA. Hyperosmotic Therapy and Use of 3% Saline for the Child with Head Injury. Oct 1988;
- 3rd World Congress on Pediatric Intensive Care: ICU Management has Altered Outcomes of Brain Injury Over the Past Decade (Debate Session) Montreal, Canada. Jun 24-29, 2000;
- Pediatric Academic Societies' Annual Meeting: Secondary Cerebral Swelling and the Use of Hypertonic Saline. Baltimore, MD Apr 28 – May 2, 2001;
- Society of Critical Care Medicine – 33rd Critical Care Congress: Hypertonic Saline for Cerebral Edema. Orlando, FL Feb 19-25, 2004;
- Critical Care Colloquium: Moderator and Panelist. ICU In-House 24-Hour Care. New York, NY Sep 30 – Oct 2, 2004;
- Scuola Internazionale di Scienze Pediatriche, Istituto Giannina Gaslini, Genova, Italy: Pathophysiology of Traumatic Brain Injury. Dec 6, 2006;
- Society of Critical Care Medicine- 36th Critical Care Congress: Osmolar Therapy in Traumatic Brain Injury. Orlando, FL Feb 16-21, 2007.

Documents, Affidavit and Letters Reviewed

39. I have reviewed various medical records, documents, affidavits and letters prior to forming the opinions in this declaration. In forming my opinions, I relied on the following documents, all of which are fully incorporated herein:

- Southwestern Medical Center visit for consultation regarding pregnancy
- NICU discharge records; Dallas Children's Hospital
- 6/8/2016 Ventriculoperitoneal Shunt Surgery
- Clearance for travel document
- After visit summary
- Outpatient records, Dr Nicholas Rich: 8/11/2016 – 5/20/2019;
- Follow up visit 8/11/2016 Pediatric Clinic Texas Tech;
- Hospital of Providence record for hospital admission for respiratory illness
- Hospital of Providence outpatient visit for education
- Southwestern follow-up note
- University of Southwestern Medical Center: Department of Neurologic Surgery outpatient visit 7/18/2018;
- All Imaging and laboratory data: The Hospital of Providence;
- All records from Providence Memorial Hospital
- Business records of Dr Jacob Hayden
- Business records of Dr Roberto Canales
- Patient's records from El Paso Children's Hospital: 8/29/2019 – 9/5/2019;
- Sequence of events of I.S. Sanchez
- Sworn Affidavit of Dr Thomas Mayes
- Notes taken by Dr Mayes at meeting with Cindy Stout
- Notes taken by Dr Mayes at meeting with Dr Lange
- Letter from Dr Mayes to DR. Roberto Canales
- Medical Board Complaint filed by David Saucedo against Robert Canales MD;
- Communication with Dr Bert Johansson, Board Certified Intensivist
- Communication with Dr. Jorge Sanchez Board Certified Intensivist
- Review of CTs and MRIs Brain 2016 – 2019;
- Chronology of events provided by patient's parents;
- Communications with Dr Berry Johanssen and Dr Jorge Sainz;

I also reviewed several expert sources in reaching my opinions and conclusion. Those sources are as follows:

- Slit Ventricles as a Neurosurgical Emergency: Case Report and Review of Literature, Zoltan Mencser; World Neurosurgery 30:493-498 Oct 2019.
- Single ventricle syndrome and early-onset secondary craniosynostosis in an infant Hyun Gee Ryoo, Seung-Ky Kim, et al, American J Case Rep. 2014 Jun 10. doi; 10.12659/AJCR.890590
- The pathophysiology of chronic noncommunicating hydrocephalus: lessons from continuous intracranial pressure monitoring and ventricular infusion testing

JOURNAL OF NEUROSURGERY Kristian Eide MD, PhD, online publication date 11 August 2017.

- The Lack of Relationship Between Intracranial Pressure and Cerebral Ventricle Indices Based on Brain Computed Tomography in Patients Undergoing Ventriculoperitoneal Shunt:
- Acta Neurochir (2015 Feb) ;157(2):257-63, Eugene Kim 1, Young-Jin Lim, Han-Seul Park, Sung-Kwon Kim, Young-Tae Jeon, Jeong-Won Hwang, Yun-Seok Lee, Hee-Pyoung Park
- Conservative and Operative Management of Iatrogenic Craniocerebral Disproportion-A Case Based Review: Thomas Beez, Christopher Munoz Bendix, etal. Child's Nervous System 2019 Jan:35(1) 19-27. doi; 10.1007/s00381=018-3981-9.
- Published on The American Board of Pediatrics (<https://www.abp.org>) Eligibility Criteria for Certification in Pediatric Critical Care Medicine.
- Slit Ventricle Syndrome Leads to 10 Year History of Repetitive Transient Central Transient Central Herniation Masquerading as Seizures Hydrocephalus Case Report.
- Cerebrospinal Fluid Shunting Complications in Children. BW Hanak etal, Pediatric Neurosurgery 2017: 52(6) 381-400.
- The Slit Ventricle Syndrome: Advances Based on Technology and Understanding, Pediatric Neurosurgery. 2004, 40: 259-263.
- Essential Neurosurgery for Medical Students. Operativeneurosurgery-online.com, Joshua J Chen MD PhD, Volume 17/Number 2/ August 2019 Supplement.

Medical History and Pertinent Details of Medical Care Facts Describing Treatment Received by I.S.

My review of the records in this case indicate the following summary of facts. These facts form the basis of my opinions in this report.

A. August 29, 2019

40. I.S. vomited for the first time, at 3:33 p.m. Dr Canales office was contacted at 3:52 p.m. An appointment was given for 5:20 pm. She vomited in the car on the way to the appointment at 5:07 pm.

41. She arrived at his office around 6:00 p.m. but was not seen until sometime after arrival. She was given Zofran for nausea and vomiting at 6:54 p.m. There is no indication that Dr. Canales appreciated I.S.'s condition given her medical history or even notated her prior medical history in diagnosing potential causes of illness.

42. After initially examining the patient, Dr Canales wanted her to stay in his office. She vomited again at 8:13 p.m. and 8:33 p.m. and remained lethargic. Dr Canales ordered her to go to the hospital at 8:34 pm. At 9:23 p.m. she was in the ED waiting room at EPCH. At 9:54 p.m. she was transferred to the peds floor room 974 on orders of Dr Canales. Other orders on the evening of August 29th by Dr Canales included blood work consisting of a comprehensive metabolic panel, CBC and a lactose free diet. She was described as awake but tired and lethargic on arrival to the pediatric floor.

43. Results of the CMP revealed a sodium of 140, CO2 of 21, osmoles of 292, glucose 125, and albumin 4.8. A CBC on the evening of August 29th revealed a MCHC 32.7, platelets 318,000, neutrophils abs 9.6 with 80% segs, and lymphocytes 1.9.

44. At 10:19 pm I.S. was wheeled to CT scan on the first floor. After CT head without contrast she was described as lethargic at 10:46 pm. It does not appear that hospital staff took any action in response to the CT scan. IV was started at 10:49.

45. CT was read by radiologist: FINDINGS: “ Left frontal intraventricular catheter is reidentified with the tip at the left frontal horn. Findings are unchanged from prior. Again seen is marked asymmetric dilatation of the left ventricle, otherwise the ventricles are decompressed. Findings are also similar to prior.

46. No midline shift. The basal cisterns are patent.”

47. IMPRESSION: Stable exam allowing for differences in technique. Stable ventricles. No evidence for hydrocephalus or shunt malfunction.

B. August 30, 2019

48. I.S. spit up 6 times on 6/30 between 12:20 am and 5:00 am. Of note SpO2 monitor was removed shortly after 6:06 am as I.S. had been taking it off. At 7:01 am Dr Canales called in an ondansetron order for nausea and vomiting. Her temperature was normal.

49. At 8:15 a.m. I.S. became limp and blue and was foaming at the mouth. When the sat monitor was replaced in read 32 with a heart rate of 168. A code was called. The PICU rapid response team arrived at 8:26 a.m. Patient was sedated with Versed, Ativan, and Rocuronium. Dr Chavez, Critical Care physician, intubated her on the first try at 8:37 a.m. and placed her on the ventilator per Dr Baduku's recommendations. Patient loaded with Keppra and transferred to PICU at 8:46 a.m.

50. Dr Canales did not come to the hospital until August 30th, arriving at her bedside at 9:10 a.m., 44 minutes after a code had been called. Dr Canales gave orders to send a VBG, to continue iv fluids, to continue current ventilator settings, to consult Dr Fierro for neuro recommendations, and to place a foley catheter.

51. At 10:00 a.m. Dr Canales stated I.S. will wake up. Dr Canales wanted to order an EEG and then a CT. However, I.S.'s father demanded that the CT head be done first. Patient went for CT at 7:24 p.m.

52. CT head and CT angiogram were obtained. The CT showed loss of gray-white differentiation and compression of basal cisterns indicative of ischemic injury compatible with markedly increased intracranial pressure. The CT angiogram revealed markedly attenuated intracerebral vessels. At 10:30 pm Sandra Saucedo RN, BSN (PACU recovery) asked what was going to be given (Mannitol) to reduce the cerebral swelling and possibly prevent or ameliorate the brain damage before it became permanent.

53. Dr Baduku nodded his head in agreement. But instead of administering Mannitol he started Vasopressin and Desmopressin (DDAVP). Rationale for this was that the patient had developed diabetes insipidus and was voiding very large amounts of urine.

54. Of note, I.S. was responding to pain throughout the day as she moved when her fingers were pinched. However, her moving throughout the day got less and less. During the day she became hypothermic and at some time during the day her pupils became fixed and dilated. When the Vasopressin was started 11:00 pm on 8/30 her serum sodium was 162-168. Serum sodium decreased to 143 within 8 hours and dropped further to 136.8 in another 4 hours most certainly increasing her ICP and decreasing any cerebral blood flow that she had at the time of the CT angiogram.

55. Dr Canales thought she had a "hypoxic stroke."

C. August 31, 2019

56. On the morning of August 31st, Dr Gupta, NS, was consulted. His exam at that time revealed fixed pupils at 4mm. Doll's eyes and cold caloric oculocephalic reflexes were not elicited. Corneal sensation was absent. She did not have a gag or a response to painful stimuli in upper extremities. She pulled away to painful stimuli in lower extremities. This most likely was a spinal reflex.

57. Dr Gupta tapped the shunt. There was no easy flow of CSF from the proximal catheter in spite of aspiration. Flow through the distal peritoneal catheter was good and reproducible. CT and MRI both demonstrated severe cerebral swelling compatible with diagnosis of severe global hypoxic ischemic injury. Both the NS and CC physician explained the grave situation to the parents.

58. Neuro exam including an apneic oxygenation test was consistent with brain death. Brain death was confirmed on 9/2/2019 with a nuclear medicine scan that documented absence of cerebral blood flow.

59. Patient was pronounced brain dead on September 1, 2019 by Dr Stevens and on September 2, 2019 by Dr Canales.

Standard of Care for Dr. Roberto Canales, M.D.

A. Eligibility Criteria for Certification in Pediatric Critical Care Medicine.

60. The widely accepted standard of care for a practicing Pediatric Intensivist is full board certification. The American Board of Pediatrics (ABP) has established a procedure for certification in pediatric critical care medicine. General Eligibility Criteria for all ABP Subspecialties must be fulfilled to be eligible for certification.

61. First, a Pediatric Intensivist must graduate from an accredited medical school in the United States or Canada or from a foreign medical school recognized by the World Health Organization.

62. Second, a Pediatric Intensivist must complete three years of training in an accredited residency program. This training involves the care of children and adolescents in hospital and outpatient settings and is supervised by highly trained medical specialists.

63. Third, a Pediatric Intensivist must satisfactory complete residency training and acceptability as a practitioner of pediatrics including the achievement of clinical competence and the demonstration of professional and ethical behavior.

64. Lastly, a Pediatric Intensivist must possess a valid, unrestricted state license to practice medicine.

65. Subspecialist may earn certification in their field after three *additional* years of training in a focused area, such as pediatric intensive care medicine.

66. As of 1988, certificates issued by the ABP are time-limited. To remain board-certified, pediatricians with time-limited certificates must complete Maintenance of Certification (“MOC”). The MOC process recognizes the pediatrician’s commitment to professionalism, lifelong learning and self-assessment, and the periodic evaluation of other competencies deemed necessary by the ABP for the continued provision of high-quality medical care.

67. A board-certified pediatrician possesses a certificate from the ABP and is sometimes referred to as a “diplomate” of the ABP. The information cited in this report relating to the standard of care for achieving board certification may be found on www.abp.org.

68. It is well established in the medical community that a doctor is unqualified to practice pediatric critical care medicine without obtaining board certification status. Board certification is the minimum criteria needed to safely and competency practice pediatric intensive care medicine. Doctors that do not obtain board certification present a danger to their patients when providing emergency critical care absent proper training and credentialing.

69. The linchpin of board certification is the three years of full-time, broad based fellowship training in pediatric critical care medicine required to be completed in a program accredited for training in pediatric critical care medicine by the Accreditation Council for Graduate Medical Education in the United States or the Royal College of Physicians and Surgeons of Canada.

B. Peer Review Standard of Care.

70. It is also well established that hospitals should implement a rigorous peer review process. Peer review is a means to objectively evaluate the quality of care provided by physicians at a given institution. Most hospitals will institute formal clinical policies for patients, and peer review assesses the quality, appropriateness and accuracy of care rendered. It is also well established that doctors should engage and participate in a qualifying peer review process to assess the quality of care provided to a doctor's patients in a clinical setting.

71. I have not evaluated any formal peer review policies in this case to determine whether any doctor violated such policy. My opinions in this report are limited to factual evidence presented by Dr. Mayes' suggesting that Dr. Canales avoided peer review altogether.

72. It is now virtually unheard of for a pediatric hospital to allow doctors to avoid a formal peer review process, which essentially means the physician is practicing medicine with no accountability. Failure to participate in a rigorous peer review process would qualify as a gross deviation from the minimum standard of care widely accepted in the medical community.

C. Standard of Care for Treating Patients in the area of Pediatric Critical Care Medicine.

73. Additionally, EPCH's doctors and professionals servicing I.S. must comply with the standards of care required of medical professionals providing critical care to I.S.

74. Summarily, the standard of care is best described as the reasonable skill, expertise, and care possessed and practiced by physicians in the same or similar community and under similar circumstances. A doctor that fails to provide care consistent with actions that a reasonably skilled doctor would provide under the same or similar circumstances constitutes a violation of the standard of care. A determination of what constitutes "care consistent with actions of a reasonably skilled doctor under the same or similar circumstances" is a factual analysis that will change depending on the circumstances, symptoms, patient history, practice area, available resources, and countless other factors.

75. The purpose of this standard of care for this report is to determine whether EPCH's medical staff acted in a manner consistent with the expectations of the medical community. If EPCH's team failed to do what is expected of a medical professional in his or her field, the professional may be in a position to cause harm to the patient.

Dr. Roberto Canales, M.D. Violated the Standards of Care in Treating I.S.

76. Based on the foregoing, it is my professional opinion that Dr. Canales violated the standards of care and caused the death of I.S. both generally and specifically as follows:

A. Violations Relating to Dr. Canales' Accommodations at EPCH.

77. Dr. Canales violated standards of care by practicing Pediatric Critical Care Medicine even though he was untrained, uncertified and unqualified to do so.

78. Dr. Tom Mayes has provided a detailed analysis of Dr. Canales' background, training and involvement at El Paso Children's Hospital. In forming my opinion, I rely on this factual testimony by Dr. Mayes in forming my opinions. Dr. Mayes' opinions expressed in his affidavit confirmed opinions I had formed after reviewing I.S.' medical history and records. Dr. Mayes' opinions are fully set forth herein and form opinions I also concur with and proffer in this report.

79. I agree with Dr. Mayes' conclusion that Dr. Canales should not have been practicing pediatric critical care given his lack of training and education, and that by doing so, Dr. Canales posed a repeated and serious threat to his patients, including I.S., in the area of pediatric critical care. Dr. Canales' unqualified care directly contributed to the death of grossly deficient care of I.S. in this case.

80. It appears from Dr. Mayes' testimony that Dr. Canales knew that managing physicians at EPCH disapproved of his practice in the area of Pediatric Critical Care Medicine. It is also apparent that Dr. Canales knew that EPCH was ignoring Dr. Mayes' repeated concerns about Dr. Canales' qualifications, repeatedly attempted to bypass a medical director's concerns (including Dr. Joshi's rejection), and attempted to provide an accommodation and exception for Dr. Canales. EPCH also deviated from standard medical practice by threatening doctors that voice disapproval of Dr. Canales.

81. Dr. Canales deviated from the standard of care set by the American Board of Pediatrics and recently outlined by the American College of Critical Care Medicine by applying for privileges in the area of Pediatric Critical Care without having required training and certification in Pediatric Critical Care.

82. Dr. Canales' insistence on practicing pediatric critical care although he was unqualified and untrained to provide Pediatric Critical Care resulted in Dr. Canales misdiagnosing the patient, which directly caused the death of the patient.

83. Each and every opinion in Dr. Maye's affidavit is fully incorporated herein and forms an opinion I have reached based on the information I have reviewed in preparing this declaration.

84. Dr. Canales also repeatedly violated the standards of care for practicing pediatric critical care by practicing Pediatric Critical Care with no peer review and oversight and by failing to adhere to industry standards relating to medical documentation and quality control. If true, Dr. Canales' practice constituted a significant danger to patients at El Paso Children's Hospital, and his work fell well outside guidelines and procedures adopted by virtually every medical hospital in North America.

85. It is virtually unheard of and constitutes a gross deviation from well-established standards of care to allow an untrained, and uncertified physician to practice pediatric critical care without any accountability.

B. Dr. Canales Violated the Standards of Care in the Treatment of I.S.

86. It is also my opinion that Dr. Canales did not meet the standard of care in caring for I.S. For example, on August 29, 2020, Dr. Canales did not meet the standard of care when his admitting diagnosis was in error as he did not realize I.S.'s presentation was a neurosurgical emergency as her symptoms were compatible with a diagnosis of elevated ICP.

87. A doctor operating under the appropriate standard of care would have fully reviewed the patient's medical history and considered noncompliant ventricle a known complication of early shunting with a ventriculoperitoneal shunt placement.

88. Dr. Canales further violated the standard of care by failing to request a stat neurosurgical consult on admission. Any reasonable doctor providing pediatric critical care to a patient under identical circumstances would have immediately diagnosed the issue based on the patient's prior medical history and symptoms and would have requested an immediate stat neurosurgical consult.

89. Additionally, in taking primary responsibility for I.S., he did not come to the hospital until the next day, arriving after she coded. Failure to promptly treat the patient when Dr. Canales was charged with the primary and exclusive treatment of the patient grossly deviates from standard medical practice and further complicated the patient's medical condition.

90. Dr. Mayes' report forms the basis of my opinions in part in this case. In particular, Dr. Mayes' describes at length a process whereby certified specialists at EPCH were precluded from treating Dr. Canales' patients. This practice has been largely rejected for decades as presenting a serious danger to patients who do not have access to readily available specialist.

91. In fact, I have never before in my career heard of a doctor ordering a patient to proceed to the emergency room and then having the hospital's emergency room staff remove the family to another waiting area for a doctor because the attending Emergency Physicians were precluded from treating the patient. To make matters worse, Dr. Canales did not arrive until almost after 9:00 a.m. on the following morning. The delay caused I.S. to require emergency medical treatment from EPCH's trauma team—an event that could have and should have been avoided had EPCH's on-call physicians provided immediate medical care. These actions constitute gross deviations from the widely accepted standards of care implemented by hospitals in the United States in the area of Pediatric Critical Care Medicine.

92. On August 30, 2020, Dr Canales did not meet the standard of care when at 9:10 am he arrived for the first time at the hospital to see I.S., 44 minutes after she coded. He believed I.S. had a seizure and did not consider that she was beginning to herniate as she had multiple emesis between 12:20 am and 5:00 am. Then about 8:15 am she had a sudden onset loss of consciousness, with apnea and cyanosis and without any noticeable clonic activity. She was noted to be posturing after intubation.

93. It is my opinion based on my review of the records that Dr. Canales did not understand and was not that concerned when he was informed that I.S. had recurrent vomiting multiple times between 12 and 5 am. His response to this message was to order ondansetron 2 mg IV push at 06:41. On August 30, 2020, Dr Canales did not meet the standard of care when at 9:10

am he arrived for the first time at the hospital to see I.S., 44 minutes after she coded. He believed she had had a seizure and he was quoted as saying she would be ok. He did not meet the standard of care by only ordering ondansetron, by not examining I.S. until about 12 hours after she had been admitted and by misdiagnosing her loss of consciousness as a seizure. He should have ordered a stat CT of her head and a stat neurosurgical consult after he was informed of her early morning repetitive vomiting and administered mannitol and hypertonic saline. Instead neurosurgery was not consulted and CT head and CT angiogram were not done until 10 hours later at 7:40 pm and she was not given any HTS. CT head done at 7:40 revealed massive swelling and CT angiogram at that time and revealed very diminished cerebral blood flow.

94. For all of the foregoing basis and reasoning, it is my opinion that Dr. Canales, in particular, caused the death of I.S. when he misdiagnosed the patient on admission and again misdiagnosed the patient in the early morning of 8/30. Both times he failed to take immediate and reasonable steps to provide immediate care to I.S. From the beginning he failed to appreciate I.S.'s prior medical history and her present symptoms. And subsequently failed to take reasonable steps to treat the patient eventually resulting in her death.

95. He created and engaged in an unsafe and dangerous pediatric critical care program at El Paso Children's Hospital

96. I declare under penalty of perjury that the foregoing is true and correct.

97. Executed in San Diego, California, on the 25th day of May, 2020.



Dr. Bradley Peterson, M.D.

SWORN DECLARATION AND REPORT OF DR. BRADLEY PETERSON
REGARDING EL PASO CHILDREN'S HOSPITAL

1. My name is Dr. Bradley Peterson, my date of birth is March 9, 1944, and my address is 3020 Children's Way MC #5065, San Diego, California 92123.

2. I am over the age of 18, and have never been convicted of a felony or a crime involving moral turpitude. I am fully competent to make this affidavit and have personal knowledge of the facts stated herein and they are true and correct. The facts and opinions recited below are based on facts which experts in my field reasonably and traditionally rely.

3. On February 28, 2020, The Buzbee Law Firm contacted me to review the medical records of a deceased three-year-old girl named I.S. and render an opinion on the care she received by El Paso Children's Hospital and the attending medical professionals. I was then hired to prepare expert reports that summarize my opinions in compliance with certain medical malpractice reporting requirements that must be produced to a defendant within a certain period of time. These opinions are subject to change to the extent I review additional documentation produced during the course of litigation.

4. The following work summarizes my opinions, research, review, experience and qualifications below. My experience, training, qualifications, research, and review of pertinent medical records form the basis of my opinions in this report in addition to any other information described in this report.

5. My attached curriculum vitae is a true and accurate representation of my education, training and experience. All of my opinions are based upon a reasonable degree of professional certainty within my field of expertise, Pediatric Critical Care. My attached curriculum vitae is fully incorporated in this report and forms a basis of my opinions in this report.

6. Summarily, as set forth in greater detail below, Dr. Canales, Dr. Stevens, El Paso Children's hospital staff and attending physicians and administration repeatedly violated the standards of care relating to I.S.'s ("patient") treatment and such violations without question caused the death of the patient. Each opinion rendered in this declaration is based on my experience, qualifications, education listed below along with my review of the documents provided by the Buzbee Law Firm.

Relevant Education, Training, and Awards

A. Training and Qualifications

7. I attend medical school at Northwestern Medical School in Chicago, Illinois. I graduated in 1970.

8. I completed a residency in Pediatrics at the University of Minnesota and at United States Balboa Naval Hospital From 1970-1973.

9. I completed training in Neonatology at Rady Children's Hospital in San Diego,

California from 1973-1975.

10. From 1975-1977, I completed a residency at Stanford University in Anesthesiology.

11. From 1972-1973, I served in the military at the United States Naval Hospital in San Diego, California as a Staff Pediatrician.

12. In 1976, I obtained board certification in Pediatrics by the American Board of Pediatrics.

13. In 1981, I became board certified in Anesthesiology with the American Board of Anesthesiology.

14. In 1987, 1994, 2002, 2012, and 2020, I obtained and renewed my board certification in Pediatric Critical Care. I also have obtained certifications in PALS, ACS, and as an ATLS Instructor.

15. I have held various roles and positions throughout my career that are relevant to my opinion in this case. From 2017-2020, I served as a Senior Consultant to RCHSD PICU.

16. From 1977-2014, I served as a Medical Director of Pediatric Critical Care at Rady Children's Hospital in San Diego, California.

17. From 1977-2017, I served as the Director of RCHSD's Pediatric Critical Care Fellowship Program.

18. From 1978-2020, I served as Medical Director of RCHSD's Pediatric Transport Team. I have also worked as a Senior Staff member of RCHSD's Pediatric Critical Care and Anesthesiology programs and as Associated Professor of Pediatrics, Anesthesiology, and Surgery at University of California San Diego.

19. From 1978-2019, I chaired RCHSD's PICU Morbidity and Mortality Conference.

20. From 1978-2019, I also chaired RCHSD's Transport Morbidity and Mortality Conference.

21. From 1984-2004, I Co-Chaired the Trauma Morbidity and Mortality Conference.

22. I have also served as a reviewer for the Journal of Pediatric Critical Care Medicine.

23. I have received various honors and awards for my work in the areas cited above. I have been awarded from the University of California San Diego for outstanding teaching in the area of Pediatric Critical Care.

24. In 1989, I received the award for outstanding clinical research for Medicine, Surgery, Anesthesiology, Pediatrics at the National SCCM Conference.

25. In 1996, I received an award for outstanding work in Pediatric Critical Care for a

paper presented at the SCCM Conference.

26. I received an Outstanding Contribution to Emergency Care award in 1996 from the San Diego County Medical Society.

27. In 1998, I was awarded an Educational Scholarship Award at the SCCM Conference.

28. I have been acknowledged as one of San Diego's "Top Doctors" in 2006, 2007, 2008, 2009, 2010, 2012, 2017.

29. In 2010, RCHSD presented me with an award for outstanding clinical care.

30. In 2012, I received an award for exceptional results for the Pediatric Critical Care Unit recognizing that our outcomes regarding survival and mortality were several standard deviations above the mean over a period of 15 years.

31. In 2016, the University of California San Diego Pediatric Critical Care Fellowship was named in my honor "The Bradley Peterson Pediatric Critical Care Fellowship."

32. In 2014, our Pediatric Life Flight Helicopter was inscribed "Caring for the future with wisdom and guidance from our mentor and friend." Bradley Peterson, M.D. MD.

33. I have been admitted as a member into the following societies and committees: the Fellow, American College of Critical Care Medicine; American Society of Anesthesiology; California Society of Anesthesiologists; American Medical Society; Fellow, American Academy of Pediatrics; San Diego County Medical Society; Society of Critical Care Medicine; Southern California PICU Network; Education Committee, Southern California PICU Network; Society for Pediatric Trauma; American Academy of Pediatrics- Transport Medicine Section; Pediatric Critical Care Colloquium Steering Committee; and Society for Pediatric Trauma; American Academy of Pediatrics—Transport Medicine.

34. I currently practice medicine as a Board Certified, practicing Pediatric Critical Care physician as set forth in my CV.

B. Personal Publications and Presentations Applicable to this Case

35. I have authored numerous medical articles, papers, and various publications during my career in the area of Pediatric Critical Care Medicine. I have also presented at numerous conferences and events across the United States and the globe, highlighting my work and medical analysis in the field of Pediatric Critical Care Medicine.

36. My curriculum vitae, attached to this report, fully details these papers and presentations.

37. I have also authored various research publications and articles and given various presentations on issues directly relevant to my analysis of the patient in this case. Each of the foregoing publications and presentations are incorporated in this declaration as though fully set

forth herein. My relevant papers include the following:

- Fisher B, Thomas D, and Peterson B: Hypertonic saline lowers raised intracranial pressure in children after head trauma. *Journal of Neurosurgical Anesthesiology* Vol. 4(1): 4-10. Jan 1992;
- Peterson B and Khanna S: Prolonged hypernatremia controls elevated intracranial pressure in head injured patients. *Critical Care Medicine*, 28(4): 1136-43, Apr 2000;
- Khanna S, David D, Peterson B and Fisher B: Use of hypertonic saline (3% NaCl) in treatment of severe refractory post traumatic intracranial hypertension in pediatric traumatic brain injury. *Critical Care Medicine*, 28(4): 1144-51, Apr 2000; and
- Gonda DD, Meltzer HS, Crawford JR, Hilfiker ML, Shellington DK, Peterson BM, Levy ML: Complications associated with prolonged hypertonic saline therapy in children with elevated intracranial pressure. *Pediatric Critical Care Medicine*. 2013; 14(6): 610-620.

38. My relevant abstracts include the following:

- Peterson B, Waltz T, et al: Use of hypertonic saline in the management of severe pediatric brain injury. *Journal of Emergency Medicine*, Jun 1988;
- Fisher B and Peterson B: Prospective study utilizing hypertonic saline to control raised intracranial pressure in children after head trauma. *The National Conference of Pediatric Trauma*, Ann Arbor, Michigan, Sep 1989;
- Stephanopoulos D, Peterson B: Atrial natriuretic factor release in pediatric head injury patients causing clinically significant hyponatremia. *Seventh Pediatric Critical Care Colloquium*. Seattle, Washington, Oct 26-29, 1994;
- Fagan M, James HE, and Peterson B: Results of intracranial pressure monitoring: A clinical report on methods employed in the 1996 year and future projections. (Poster presentation at the Tenth Annual Pediatric Critical Care Colloquium, Hot Springs, Arkansas, Sep 1997);
- Khanna S, Fisher B, Peterson B: Prolonged Hypernatremia Safely Controls Elevated Intracranial Pressure in Pediatric Head Injury Patients. (Poster presentation at the Society of Critical Care Medicine, 27th Educational and Science Symposium, San Antonio, Texas, Feb 2-8, 1998);
- Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3%NaCl) in the Treatment of Resistant intracranial Hypertension in Pediatric Head Injured Patients. (Oral presentation to the Section of Critical Care of the American Academy of Pediatrics, San Francisco, CA Oct 1998);

- Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3% NaCl) in the Treatment of Severe Refractory Post Traumatic Intracranial Hypertension in Pediatric Head Injured Patients. (Poster presentation at the Society of Critical Care Medicine, San Francisco, CA Jan 1999). Paper received 1998 Scholarship Award.
- Parsapour K, Fathi A, Rafaat K, and Peterson B: 3% Hypertonic saline may improve concussive symptoms: (Oral presentation at the 16th Pediatric Critical Care Colloquium, Snowbird, Utah Feb 2006) Pediatric Critical Care Medicine. Abstract Translations 7(5): 514, S

39. I have authored various book chapters, including the following that are relevant to my analysis in this declaration:

- Peterson B, Duthie S: Chapter 248 – Pediatric Trauma, Textbook Critical Care, 5th Edition. Edited by Fink, et al. 2005;
- Peterson B, Duthie S: Pediatric Trauma. In JL Vincent, et al (Eds.) Textbook of Critical Care, 6th Edition (Chapter 210, pp 1529-1542). Philadelphia

40. I have also presented numerous presentations at National and International medical conferences that were relied upon and relevant to my declaration in this case, including:

- National Conference on Pediatric Trauma: Use of Hypertonic Saline in the Management of Severe Pediatric Brain Injury. Boston, MA Sep 1987;
- National Pediatric Critical Care Nursing Conference: San Diego, CA. Hyperosmotic Therapy and Use of 3% Saline for the Child with Head Injury. Oct 1988;
- 3rd World Congress on Pediatric Intensive Care: ICU Management has Altered Outcomes of Brain Injury Over the Past Decade (Debate Session) Montreal, Canada. Jun 24-29, 2000;
- Pediatric Academic Societies' Annual Meeting: Secondary Cerebral Swelling and the Use of Hypertonic Saline. Baltimore, MD Apr 28 – May 2, 2001;
- Society of Critical Care Medicine – 33rd Critical Care Congress: Hypertonic Saline for Cerebral Edema. Orlando, FL Feb 19-25, 2004;
- Critical Care Colloquium: Moderator and Panelist. ICU In-House 24-Hour Care. New York, NY Sep 30 – Oct 2, 2004;
- Scuola Internazionale di Scienze Pediatriche, Istituto Giannina Gaslini, Genova, Italy: Pathophysiology of Traumatic Brain Injury. Dec 6, 2006; and

- Society of Critical Care Medicine- 36th Critical Care Congress: Osmolar Therapy in Traumatic Brain Injury. Orlando, FL Feb 16-21, 2007.

Documents, Affidavit and Letters Reviewed

41. I have reviewed various medical records, documents, affidavits and letters prior to forming the opinions in this declaration. In forming my opinions, I relied on the following documents, all of which are fully incorporated herein:

- Southwestern Medical Center visit for consultation regarding pregnancy
- NICU discharge records; Dallas Children's Hospital
- 6/8/2016 Ventriculoperitoneal Shunt Surgery
- Clearance for travel document
- After visit summary
- Outpatient records, Dr Nicholas Rich: 8/11/2016 – 5/20/2019;
- Follow up visit 8/11/2016 Pediatric Clinic Texas Tech;
- Hospital of Providence record for hospital admission for respiratory illness
- Hospital of Providence outpatient visit for education
- Southwestern follow-up note
- University of Southwestern Medical Center: Department of Neurologic Surgery outpatient visit 7/18/2018;
- All Imaging and laboratory data: The Hospital of Providence;
- All records from Providence Memorial Hospital
- Business records of Dr Jacob Hayden
- Business records of Dr Roberto Canales
- Patient's records from El Paso Children's Hospital: 8/29/2019 – 9/5/2019;
- Sequence of events of I.S. Sanchez
- Sworn Affidavit of Dr Thomas Mayes
- Notes taken by Dr Mayes at meeting with Cindy Stout
- Notes taken by Dr Mayes at meeting with Dr Lange
- Letter from Dr Mayes to DR. Roberto Canales
- Medical Board Complaint filed by David Saucedo against Robert Canales MD;
- Communication with Dr Bert Johansson, Board Certified Intensivist
- Communication with Dr. Jorge Sanchez Board Certified Intensivist
- Review of CT and MRI, Brain 2016 – 2019;
- Chronology of events provided by patient's parents;
- Communications with Dr Berry Johanssen and Dr Jorge Sainz;

42. I also reviewed several expert sources in reaching my opinions and conclusion. Those sources are as follows:

- Slit Ventricles as a Neurosurgical Emergency: Case Report and Review of Literature, Zoltan Mencser; World Neurosurgery 30:493-498 Oct 2019.

- Single ventricle syndrome and early-onset secondary craniosynostosis in an infant Hyun Gee Ryoo, Seung-Ky Kim, et al, American J Case Rep. 2014 Jun 10.doi; 10.12659/AJCR.890590
- The pathophysiology of chronic noncommunicating hydrocephalus: lessons from continuous intracranial pressure monitoring and ventricular infusion testing JOURNAL OF NEUROSURGERY Kristian Eide MD, PhD, online publication date 11 August 2017.
- The Lack of Relationship Between Intracranial Pressure and Cerebral Ventricle Indices Based on Brain Computed Tomography in Patients Undergoing Ventriculoperitoneal Shunt: Acta Neurochir (2015 Feb;157(2):257-63) Eugene Kim, Young-Jin Lim, Han Seul Park, S K Kim, Y Jeon, J Hwang, Y Lee, Hee-Pyoung Park
- Conservative and Operative Management of Iatrogenic Craniocerebral Disproportion-A Case-Based Review: Thomas Beez, Christopher Munoz Bendix, etal. Child's Nervous System 2019 Jan:35(1) 19-27. doi; 10.1007/s00381-018-3981-9
- Published on The American Board of Pediatrics (<https://www.abp.org>) Eligibility Criteria for Certification in Pediatric Critical Care Medicine.
- Slit Ventricle Syndrome Leads to 10 Year History of Repetitive Transient Central Transient Central Herniation Masquerading as Seizures Hydrocephalus Case Report.
- Cerebrospinal Fluid Shunting Complications in Children. BW Hanak etal, Pediatric Neurosurgery 2017: 52(6) 381-400.
- The Slit Ventricle Syndrome: Advances Based on Technology and Understanding, Pediatric Neurosurgery. 2004, 40: 259-263.
- Essential Neurosurgery for Medical Students. Operativeneurosurgery-online.com, Joshua J Chen MD PhD, Volume 17/Number 2/ August 2019 Supplement.

Medical History and Pertinent Details of Medical Care
Facts Describing Treatment Received by I.S.

43. My review of the records in this case indicate the following summary of facts. These facts form the basis of my opinions in this report.

A. August 29, 2019

44. I.S. vomited for the first time, at 3:33 p.m. Dr Canales office was contacted at 3:52 p.m. An appointment was given for 5:20 pm. She vomited in the car on the way to the appointment at 5:07 pm.

45. She arrived at his office around 6:00 p.m. but was not seen until sometime after arrival. She was given Zofran for nausea and vomiting at 6:54 p.m. There is no indication that Dr. Canales appreciated I.S.'s condition given her medical history or even notated her prior medical history in diagnosing potential causes of illness.

46. After initially examining the patient, Dr Canales wanted her to stay in his office. She vomited again at 8:13 p.m. and 8:33 p.m. and remained lethargic. Dr Canales ordered her to go to the hospital at 8:34 pm. At 9:23 p.m. she was in the ED waiting room at EPCH. At 9:54 p.m. she was transferred to the peds floor room 974 on orders of Dr Canales. Other orders on the evening of August 29th by Dr Canales included blood work consisting of a comprehensive metabolic panel, CBC and a lactose free diet. She was described as awake but tired and lethargic on arrival to the pediatric floor.

47. Results of the CMP revealed a sodium of 140, CO₂ of 21, osmoles of 292, glucose 125, and albumin 4.8. A CBC on the evening of August 29th revealed a MCHC 32.7, platelets 318,000, neutrophils abs 9.6 with 80% segs, and lymphocytes 1.9.

48. At 10:19 pm I.S. was wheeled to CT scan on the first floor. After CT head without contrast she was described as lethargic at 10:46 pm. It does not appear that hospital staff took any action in response to the CT scan. IV was started at 10:49.

49. CT was read by radiologist: FINDINGS: " Left frontal intraventricular catheter is reidentified with the tip at the left frontal horn. Findings are unchanged from prior. Again seen is marked asymmetric dilatation of the left ventricle, otherwise the ventricles are decompressed. Findings are also similar to prior.

50. No midline shift. The basal cisterns are patent."

51. IMPRESSION: Stable exam allowing for differences in technique. Stable ventricles. No evidence for hydrocephalus or shunt malfunction.

B. August 30, 2019

52. I.S. spit up 6 times on 6/30 between 12:20 am and 5:00 am. Of note SpO₂ monitor was removed shortly after 6:06 am as I.S. had been taking it off. At 7:01 am Dr Canales called in an ondansetron order for nausea and vomiting. Her temperature was normal.

53. At 8:15 a.m. I.S. became limp and blue and was foaming at the mouth. When the sat monitor was replaced in read 32 with a heart rate of 168. A code was called. The PICU rapid response team arrived at 8:26 a.m. Patient was sedated with Versed, Ativan, and Rocuronium. Dr Chavez, Critical Care physician, intubated her on the first try at 8:37 a.m. and placed her on the

ventilator per Dr Baduku's recommendations. Patient loaded with Keppra and transferred to PICU at 8:46 a.m.

54. Dr Canales did not come to the hospital until August 30th, arriving at her bedside at 9:10 a.m., 44 minutes after a code had been called. Dr Canales gave orders to send a VBG, to continue iv fluids, to continue current ventilator settings, to consult Dr Fierro for neuro recommendations, and to place a foley catheter.

55. At 10:00 a.m. Dr Canales stated I.S. will wake up. Dr Canales wanted to order an EEG and then a CT. However, I.S.'s father demanded that the CT head be done first. Patient went for CT at 7:24 p.m.

56. CT head and CT angiogram were obtained. The CT showed loss of gray-white differentiation and compression of basal cisterns indicative of hypoxic ischemic injury compatible with markedly increased intracranial pressure. The CT angiogram revealed markedly attenuated intracerebral vessels. At 10:30 pm Sandra Saucedo RN, BSN (PACU recovery) asked what was going to be given (Mannitol) to reduce the cerebral swelling and possibly prevent or ameliorate the brain damage before it became permanent.

57. Dr Baduku nodded his head in agreement. But instead of administering Mannitol he started Vasopressin and Desmopressin (DDAVP). Rationale for this was that the patient had developed diabetes insipidus and was voiding very large amounts of urine.

58. Of note, I.S. was responding to pain throughout the day as she moved when her fingers were pinched. However, her moving throughout the day got less and less. During the day she became hypothermic and at some time during the day her pupils became fixed and dilated. When the Vasopressin was started 11:00 pm on 8/30 her serum sodium was 162-168. Serum sodium decreased to 143 within 8 hours and dropped further to 136.8 in another 4 hours most certainly increasing her ICP and decreasing any cerebral blood flow that she had at the time of the CT angiogram.

59. Dr Canales thought she had a "hypoxic stroke."

C. August 31, 2019

60. On the morning of August 31st, Dr Gupta, NS, was consulted. His exam at that time revealed fixed pupils at 4mm. Doll's eyes and cold caloric oculocephalic reflexes were not elicited. Corneal sensation was absent. She did not have a gag or a response to painful stimuli in upper extremities. She pulled away to painful stimuli in lower extremities. This most likely was a spinal reflex.

61. Dr Gupta tapped the shunt. There was no easy flow of CSF from the proximal catheter in spite of aspiration. Flow through the distal peritoneal catheter was good and reproducible. CT and MRI both demonstrated severe cerebral swelling compatible with diagnosis of severe global hypoxic ischemic injury. Both the NS and CC physician explained the grave situation to the parents.

62. Neuro exam including an apneic oxygenation test was consistent with brain death. Brain death was confirmed on 9/2/2019 with a nuclear medicine scan that documented absence of cerebral blood flow.

63. Patient was pronounced brain dead on September 1, 2019 by Dr Stevens and on September 2, 2019 by Dr Canales.

Standard of Care for EPCH

A. Eligibility Criteria for Certification in Pediatric Critical Care Medicine.

64. The widely accepted standard of care for a practicing Pediatric Intensivist is full board certification. The American Board of Pediatrics (ABP) has established a procedure for certification in pediatric critical care medicine. General Eligibility Criteria for all ABP Subspecialties must be fulfilled to be eligible for certification.

65. First, a Pediatric Intensivist must graduate from an accredited medical school in the United States or Canada or from a foreign medical school recognized by the World Health Organization.

66. Second, a Pediatric Intensivist must complete three years of training in an accredited residency program. This training involves the care of children and adolescents in hospital and outpatient settings and is supervised by highly trained medical specialists.

67. Third, a Pediatric Intensivist must satisfactory complete residency training and acceptability as a practitioner of pediatrics including the achievement of clinical competence and the demonstration of professional and ethical behavior.

68. Lastly, a Pediatric Intensivist must possess a valid, unrestricted state license to practice medicine.

69. Subspecialists may earn certification in their field after three *additional* years of training in a focused area, such as pediatric intensive care medicine.

70. As of 1988, certificates issued by the ABP are time-limited. To remain board-certified, pediatricians with time-limited certificates must complete Maintenance of Certification (“MOC”). The MOC process recognizes the pediatrician’s commitment to professionalism, lifelong learning and self-assessment, and the periodic evaluation of other competencies deemed necessary by the ABP for the continued provision of high-quality medical care.

71. A board-certified pediatrician possesses a certificate from the ABP and is sometimes referred to as a “diplomat” of the ABP. The information cited in this report relating to the standard of care for achieving board certification may be found on www.abp.org.

72. It is well established in the medical community that a doctor is unqualified to practice pediatric critical care medicine without obtaining board certification status. Board certification is the minimum criteria needed to safely and competently practice pediatric intensive

care medicine. Doctors that do not obtain board certification present a danger to their patients when providing emergency critical care absent proper training and credentialing.

73. The linchpin of board certification is the three years of full-time, broad based fellowship training in pediatric critical care medicine are required to be completed in a program accredited for training in pediatric critical care medicine by the Accreditation Council for Graduate Medical Education in the United States or the Royal College of Physicians and Surgeons of Canada.

B. Peer Review Standard of Care.

74. The Joint Commission on Accreditation requires that hospitals conduct peer review to retain accreditation. EPCH, therefore, is required to implement a rigorous peer review policy and procedures in order to maintain its accreditation.

75. Peer review is a means to objectively evaluate the quality of care provided by physicians at a given institution. In other words, peer review is the process whereby doctors evaluate the quality of their colleagues' work in order to ensure that prevailing standards of care are being met.

76. It is a well-established standard of care that hospitals must implement a rigorous peer review process and ensure that its doctors are fully complying with the peer review procedures instituted by the hospital. Most hospitals will institute formal clinical policies for patients, and peer review assesses the quality, appropriateness and accuracy of care rendered to patients under these guidelines.

77. I have not evaluated any of EPCH's formal peer review policies in this case to determine whether any doctor violated such policy. My opinions in this report are limited to factual evidence presented by Dr. Mayes' suggesting that Dr. Canales avoided peer review altogether.

78. It is now virtually unheard of for a pediatric children's hospital in the United States to allow doctors to avoid a formal peer review process or instruct managing doctors to refrain from reviewing the quality of care provided by a single physician. To do so essentially means the physician is practicing medicine with no accountability. Failure to participate in a rigorous peer review process would qualify as a gross deviation from the minimum standard of care widely accepted in the medical community.

C. Standard of Care for Treating Patients in the area of Pediatric Critical Care Medicine.

79. Additionally, EPCH's doctors and professionals servicing I.S. must comply with the standards of care required of medical professionals providing critical care to I.S.

80. Summarily, the standard of care is best described as the reasonable skill, expertise, and care possessed and practiced by physicians in the same or similar community and under similar circumstances. A doctor that fails to provide care consistent with actions that a reasonably skilled doctor would provide under the same or similar circumstances constitutes a violation of the standard of care. A determination of what constitutes "care consistent with actions of a reasonably skilled doctor under the same or similar circumstances" is a factual analysis that will change

depending on the circumstances, symptoms, patient history, practice area, available resources, and countless other factors.

81. The purpose of this standard of care for this report is to determine whether EPCH's medical staff acted in a manner consistent with the expectations of the medical community. If EPCH's team failed to do what is expected of a medical professional in his or her field, the professional may be in a position to cause harm to the patient.

EPCH Violated the Standards of Care in Treating I.S.

82. Based on the foregoing, it is my professional opinion that EPCH violated the standards of care and caused the death of I.S. both generally and specifically as follows:

A. Violations Relating to Dr. Canales' Accommodations at EPCH

83. EPCH violated standards of care by allowing Dr. Canales to practice Pediatric Critical Care Medicine even though he was untrained, uncertified and unqualified to do so.

84. Dr. Tom Mayes has provided a detailed analysis of Dr. Canales' background, training and involvement at El Paso Children's Hospital. In forming my opinion, I rely on this factual testimony by Dr. Mayes in forming my opinions. Dr. Mayes' opinions expressed in his affidavit confirmed opinions I had formed after reviewing I.S.' medical history and records. Dr. Mayes' opinions are fully set forth herein and form opinions I also concur with and proffer in this report.

85. I agree with Dr. Mayes' conclusion that Dr. Canales should not have been practicing pediatric critical care given his lack of training and education, and that by doing so, Dr. Canales posed a repeated and serious threat to his patients, including I.S., in the area of pediatric critical care. Dr. Canales' unqualified care directly contributed to the death of grossly deficient care of I.S. in this case.

86. El Paso Children's Hospital also deviated from standard medical practice and procedures widely accepted in the medical field by ignoring Dr. Mayes' repeated concerns about Dr. Canales' qualifications, repeated attempts to bypass a medical director's concerns (including Dr. Joshi's rejection), and direct attempts to provide an accommodation and exception for Dr. Canales. EPCH also deviated from standard medical practice by threatening doctors that voice disapproval of Dr. Canales.

87. EPCH administration deviated from the standard of care set by the American Board of Pediatrics and recently outlined by the American College of Critical Care Medicine by allowing Dr Canales privileges in Critical Care without having required training and certification in Pediatric Critical Care.

88. By ignoring Dr. Mayes's concerns and complaints, El Paso Children's Hospital allowed a doctor who was unqualified and untrained to provide Pediatric Critical Care to service

the patient. This resulted in Dr. Canales misdiagnosing the patient, which directly caused the death of the patient.

89. It is my opinion that El Paso Children's Hospital's administration's actions to bypass and ignore Dr. Maye's concerns directly contributed to the death of the patient. Each and every opinion in Dr. Maye's affidavit is fully incorporated herein and forms an opinion I have reached based on the information I have reviewed in preparing this declaration.

90. Dr. Canales also repeatedly violated the standards of care for practicing pediatric critical care by practicing Pediatric Critical Care with no peer review and oversight and by failing to adhere to industry standards relating to medical documentation and quality control. If true, Dr. Canales' practice constituted a significant danger to patients at El Paso Children's Hospital, and his work fell well outside guidelines and procedures adopted by virtually every medical hospital in North America.

91. It is virtually unheard of for a medical institution such as EPCH to deviate from a well-established standard of care and allow an untrained, and uncertified physician to practice pediatric critical care without any accountability.

B. EPCH Violated the Standards of Care in the Treatment of I.S.

92. It is also my opinion that Dr. Canales did not meet the standard of care in caring for I.S. For example, on August 29, 2020, Dr. Canales did not meet the standard of care when his admitting diagnosis was in error as he did not realize I.S.'s presentation was a neurosurgical emergency as her symptoms were compatible with a diagnosis of elevated ICP.

93. A doctor operating under the appropriate standard of care would have fully reviewed the patient's medical history and considered noncompliant ventricle a known complication of early shunting with a ventriculoperitoneal shunt placement.

94. Dr. Canales further violated the standard of care by failing to request a stat neurosurgical consult on admission. Any reasonable doctor providing pediatric critical care to a patient under identical circumstances would have immediately diagnosed the issue based on the patient's prior medical history and symptoms and would have requested an immediate stat neurosurgical consult.

95. Additionally, in taking primary responsibility for I.S., he did not come to the hospital until the next day, arriving after she coded. Failure to promptly treat the patient when Dr. Canales was charged with the primary and exclusive treatment of the patient grossly deviates from standard medical practice and further complicated the patient's medical condition.

96. Dr. Mayes' report forms the basis of my opinions in part in this case. In particular, Dr. Mayes' describes at length a process whereby certified specialists at EPCH were precluded from treating Dr. Canales' patients. This practice has been largely rejected for decades as presenting a serious danger to patients who do not have access to readily available specialist.

97. In fact, I have never before in my career heard of a doctor ordering a patient to proceed to the emergency room and then having the hospital's emergency room staff remove the

family to another waiting area for a doctor because the attending Emergency physicians were precluded from treating the patient. To make matters worse, Dr. Canales did not arrive until after 9:00 a.m. on the following morning. The delay caused I.S. to require emergency medical treatment from EPCH's (trauma? team)—an event that could have and should have been avoided had EPCH's on-call physicians provided immediate medical care. These actions constitute gross deviations from the widely accepted standards of care implemented by hospitals in the United States in the area of Pediatric Critical Care Medicine.

98. On August 30, 2020, Dr Canales did not meet the standard of care when at 9:10 am he arrived for the first time at the hospital to see I.S., 44 minutes after she coded. He believed I.S. had a seizure and did not consider that she was beginning to herniate as she had multiple emesis early that am, and about 8:15 am had sudden onset loss of consciousness, with apnea and cyanosis and without any noticeable clonic activity. She was noted to be posturing after intubation.

99. It is my opinion based on my review of the records that Dr. Canales did not understand what was going on, as when he was notified after 6 am regarding her persistent vomiting between midnight and 5am instead of ordering a stat CT and a stat neurosurgical consult he gave a verbal telephone order for intravenous ondansetron at 6:40 am. Shortly after he arrived he again misdiagnosed her saying she had a seizure and was quoted as saying she would be ok. He should have ordered a stat CT of her head at 9:30 am and a stat neurosurgical consult and administered mannitol and hypertonic saline. Instead neurosurgery was not consulted and CT head and CT angiogram were not done until after 7:40 pm. CT head revealed massive swelling and CT angiogram revealed very diminished cerebral blood flow.

100. While this was occurring, Dr. Naomi Silva, a radiologist at El Paso Children's Hospital, also violated the standard of care on August 29, 2019. She read the CT head on 8/29/2019 correctly but should have known the clinical reason for obtaining CT head and known that the patient probably had a noncompliant ventricle. She failed to properly analyze and rule out non compliant ventricle and misdiagnosed the patient.

101. On August 30, 2019 at 2:49 p.m., Dr. Rodolfo Fierro-Stevens, a neurologist was consulted. As the attending neurologist, Dr. Steven was required to fully review the patient's medical history and records in diagnosing I.S. 's condition. In my opinion, Dr. Stevens failed to fully review and appreciate the patients' medical history. I reached this conclusion based on the symptoms exhibited by the patient and the patient's clear medical history involving elevated intracranial pressure.

102. I believe he reviewed her history, the findings on the admission exam, and admission CT head. Her history of a ventriculoperitoneal shunt placed at 3 weeks of age and her symptoms of persistent emesis and lethargy on admission on 8/29/2019 are classic for increased intracranial pressure in a child who was shunted at 3weeks of age.

103. After admission to EPCH she had persistent emesis from 12:20 am until 5:00 am and about 8:05 am became apneic, cyanotic and flaccid. No tonic clonic activity was noted. A code was called and she was intubated and subsequently transferred to the ICU where she was placed on mechanical ventilation. The symptoms of acute onset of apnea, bradycardia and flaccidity followed by posturing are classic for tonsillar herniation and not for a seizure.

104. Dr. Rodolfo Fierro-Stevens noted in addition to tonic posturing Ivanna had sluggish pupils to light on his exam, a sign of elevated ICP. He thought she would wake up and allow a better exam. He did not meet the standard of care for a board-certified neurologist as he should have suspected dangerously elevated intracranial pressure from the history of early shunting, and presenting complaints of persistent vomiting and lethargy on 8/29.

105. After her code he was proceeding with a diagnosis of a seizure even though he expressed doubts that it was “not typical”. The acute apnea and bradycardia were classic for acute tonsillar herniation secondary to increased ICP abetted by a mild Chiari condition.

106. He fell below the standard of care as he missed the diagnosis thinking it was a seizure, never considering that her ICP was severely elevated and that she was herniating. He should have ordered a stat CT of her head and a stat neurosurgical consult and remained close to her bedside until the CT head result was obtained. (Of note a CT head would take about 5-10 minutes) Instead he left her bedside, did not notify neurosurgery, and a CT head was not obtained until 9 hours later. This was far below the standard of care and resulted in severe ischemic brain injury and her death, both of which could have been prevented if he would have acted appropriately in a timely manner.

107. On October 30, 2019, Dr. Baduku did not meet the standard of care when He did not obtain a stat neurosurgical consult. Nor did he start any therapies to decrease brain swelling and ICP. Instead, he started Vasopressin which dropped serum sodium and osmoles, and increased her intracranial pressure. Dr. Baduku failed to appreciate I.S.’s prior medical history and consider that the patient probably had a noncompliant ventricle.

108. For all of the foregoing basis and reasoning, it is my opinion that El Paso Children’s Hospital, and particularly Dr. Canales, caused the death of I.S. when they misdiagnosed the patient, failed to take reasonable steps to provide immediate care to I.S., failed to appreciate I.S.’s prior medical history and determine the patient’s condition based on the present symptoms, failed to take reasonable steps to treat the patient, and implemented an unsafe and dangerous pediatric critical care program at El Paso.

109. I declare under penalty of perjury that the foregoing is true and correct.

110. Executed in San Diego, California, on the 25th day of May, 2020.



Dr. Bradley Peterson, M.D.

SWORN DECLARATION AND REPORT OF DR. BRADLEY PETERSON
REGARDING DR. RODOLFO FIERRO-STEVENS, M.D.

1. My name is Dr. Bradley Peterson, my date of birth is March 9, 1944, and my address is 3020 Children's Way MC #5065, San Diego, California 92123.

2. I am over the age of 18, and have never been convicted of a felony or a crime involving moral turpitude. I am fully competent to make this affidavit and have personal knowledge of the facts stated herein and they are true and correct. The facts and opinions recited below are based on facts which experts in my field reasonably and traditionally rely.

3. On February 28, 2020, The Buzbee Law Firm contacted me to review the medical records of a deceased three-year-old girl named I.S. and render an opinion on the care she received by El Paso Children's Hospital and the attending medical professionals. I was then hired to prepare expert reports that summarize my opinions in compliance with certain medical malpractice reporting requirements that must be produced to a defendant within a certain period of time. These opinions are subject to change to the extent I review additional documentation produced during the course of litigation.

4. The following work summarizes my opinions, research, review, experience and qualifications below. My experience, training, qualifications, research, and review of pertinent medical records form the basis of my opinions in this report in addition to any other information described in this report.

5. My attached curriculum vitae is a true and accurate representation of my education, training and experience. All of my opinions are based upon a reasonable degree of professional certainty within my field of expertise, Pediatric Critical Care. My attached curriculum vitae is fully incorporated in this report and forms a basis of my opinions in this report.

6. Summarily, as set forth in greater detail below, Dr. Stevens, repeatedly violated the standards of care relating to I.S. 's ("patient") treatment and such violations without question caused the death of the patient. Each opinion rendered in this declaration is based on my experience, qualifications, education listed below along with my review of the documents provided by the Buzbee Law Firm.

Relevant Education, Training, and Awards

A. Training and Qualifications

7. I attend medical school at Northwestern Medical School in Chicago, Illinois. I graduated in 1970.

8. I completed a residency in Pediatrics at the University of Minnesota and at United States Balboa Naval Hospital From 1970-1973.

9. I completed training in Neonatology at Rady Children's Hospital in San Diego, California from 1973-1975.

10. From 1975-1977, I completed a residency at Stanford University in Anesthesiology.
11. From 1972-1973, I served in the military at the United States Naval Hospital in San Diego, California as a Staff Pediatrician.
12. In 1976, I obtained board certification in Pediatrics by the American Board of Pediatrics.
13. In 1981, I became board certified in Anesthesiology with the American Board of Anesthesiology.
14. In 1987, 1994, 2002, 2012, and 2020, I obtained and renewed my board certification in Pediatric Critical Care.
15. I also have obtained certifications in PALS, ACS, and as an ATLS Instructor.
16. I have held various roles and positions throughout my career that are relevant to my opinion in this case.
17. From 2017-2020, I served as a Senior Consultant to RCHSD PICU.
18. From 1977-2014, I served as a Medical Director of Pediatric Critical Care at Rady Children's Hospital in San Diego, California.
19. From 1977-2017, I served as the Director of RCHSD's Pediatric Critical Care Fellowship Program.
20. From 1978-2020, I served as Medical Director of RCHSD's Pediatric Transport Team.
21. I have also worked as a Senior Staff member of RCHSD's Pediatric Critical Care and Anesthesiology programs and as Associated Professor of Pediatrics, Anesthesiology, and Surgery at University of California San Diego.
22. From 1978-2019, I chaired RCHSD's PICU Morbidity and Mortality Conference.
23. From 1978-2019, I also chaired RCHSD's Transport Morbidity and Mortality Conference. From 1984-2004, I Co-Chaired the Trauma Morbidity and Mortality Conference.
24. I have also served as a reviewer for the Journal of Pediatric Critical Care Medicine.
25. I have received various honors and awards for my work in the areas cited above.
26. I have been awarded from the University of California San Diego for outstanding teaching in the area of Pediatric Critical Care.
27. In 1989, I received the award for outstanding clinical research for Medicine, Surgery, Anesthesiology, Pediatrics at the National SCCM Conference.

28. In 1996, I received an award for outstanding work in Pediatric Critical Care for a paper presented at the SCCM Conference.

29. I received an Outstanding Contribution to Emergency Care award in 1996 from the San Diego County Medical Society.

30. In 1998, I was awarded an Educational Scholarship Award at the SCCM Conference.

31. I have been acknowledged as one of San Diego's "Top Doctors" in 2006, 2007, 2008, 2009, 2010, 2012, 2017.

32. In 2010, RCHSD presented me with an award for outstanding clinical care.

33. In 2012, I received an award for exceptional results for the Pediatric Critical Care Unit recognizing that our outcomes regarding survival and mortality were several standard deviations above the mean over a period of 15 years.

34. In 2016, the University of California San Diego Pediatric Critical Care Fellowship was named in my honor "The Bradley Peterson Pediatric Critical Care Fellowship."

35. In 2014, our Pediatric Life Flight Helicopter was inscribed "Caring for the future with wisdom and guidance from our mentor and friend." Bradley Peterson, M.D. MD.

36. I have been admitted as a member into the following societies and committees: the Fellow, American College of Critical Care Medicine; American Society of Anesthesiology; California Society of Anesthesiologists; American Medical Society; Fellow, American Academy of Pediatrics; San Diego County Medical Society; Society of Critical Care Medicine; Southern California PICU Network; Education Committee, Southern California PICU Network; Society for Pediatric Trauma; American Academy of Pediatrics- Transport Medicine Section; Pediatric Critical Care Colloquium Steering Committee; and Society for Pediatric Trauma; American Academy of Pediatrics—Transport Medicine.

37. I currently practice medicine as a Board Certified, practicing Pediatric Critical Care physician as set forth in my CV. I have practiced Pediatric Critical Care for 43 years

B. Personal Publications and Presentations Applicable to this Case

38. I have authored numerous medical articles, papers, and various publications during my career in the area of Pediatric Critical Care Medicine. I have also presented at numerous conferences and events across the United States and the globe, highlighting my work and medical analysis in the field of Pediatric Critical Care Medicine.

39. My curriculum vitae, attached to this report, fully details these papers and presentations.

40. I have also authored various research publications and articles and given various presentations on issues directly relevant to my analysis of the patient in this case. Each of the

foregoing publications and presentations are incorporated in this declaration as though fully set forth herein. My relevant papers include the following:

- Fisher B, Thomas D, and Peterson B: Hypertonic saline lowers raised intracranial pressure in children after head trauma. *Journal of Neurosurgical Anesthesiology* Vol. 4(1): 4-10. Jan 1992;
- Peterson B and Khanna S: Prolonged hypernatremia controls elevated intracranial pressure in head injured patients. *Critical Care Medicine*, 28(4): 1136-43, Apr 2000;
- Khanna S, David D, Peterson B and Fisher B: Use of hypertonic saline (3% NaCl) in treatment of severe refractory post traumatic intracranial hypertension in pediatric traumatic brain injury. *Critical Care Medicine*, 28(4): 1144-51, Apr 2000; and
- Gonda DD, Meltzer HS, Crawford JR, Hilfiker ML, Shellington DK, Peterson BM, Levy ML: Complications associated with prolonged hypertonic saline therapy in children with elevated intracranial pressure. *Pediatric Critical Care Medicine*. 2013; 14(6): 610-620.

41. My relevant abstracts include the following:

- Peterson B, Waltz T, et al: Use of hypertonic saline in the management of severe pediatric brain injury. *Journal of Emergency Medicine*, Jun 1988;
- Fisher B and Peterson B: Prospective study utilizing hypertonic saline to control raised intracranial pressure in children after head trauma. *The National Conference of Pediatric Trauma*, Ann Arbor, Michigan, Sep 1989;
- Stephanopoulos D, Peterson B: Atrial natriuretic factor release in pediatric head injury patients causing clinically significant hyponatremia. *Seventh Pediatric Critical Care Colloquium*. Seattle, Washington, Oct 26-29, 1994;
- Fagan M, James HE, and Peterson B: Results of intracranial pressure monitoring: A clinical report on methods employed in the 1996 year and future projections. (Poster presentation at the Tenth Annual Pediatric Critical Care Colloquium, Hot Springs, Arkansas, Sep 1997);
- Khanna S, Fisher B, Peterson B: Prolonged Hypernatremia Safely Controls Elevated Intracranial Pressure in Pediatric Head Injury Patients. (Poster presentation at the Society of Critical Care Medicine, 27th Educational and Science Symposium, San Antonio, Texas, Feb 2-8, 1998);
- Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3%NaCl) in the Treatment of Resistant intracranial Hypertension in Pediatric Head Injured Patients. (Oral presentation to the Section of Critical Care of the American Academy of Pediatrics, San Francisco, CA Oct 1998);

- Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3% NaCl) in the Treatment of Severe Refractory Post Traumatic Intracranial Hypertension in Pediatric Head Injured Patients. (Poster presentation at the Society of Critical Care Medicine, San Francisco, CA Jan 1999). Paper received 1998 Scholarship Award.
- Parsapour K, Fathi A, Rafaat K, and Peterson B: 3% Hypertonic saline may improve concussive symptoms: (Oral presentation at the 16th Pediatric Critical Care Colloquium, Snowbird, Utah Feb 2006) Pediatric Critical Care Medicine. Abstract Translations 7(5): 514, S

42. I have authored various book chapters, including the following that are relevant to my analysis in this declaration:

- Peterson B, Duthie S: Chapter 248 – Pediatric Trauma, Textbook Critical Care, 5th Edition. Edited by Fink, et al. 2005;
- Peterson B, Duthie S: Pediatric Trauma. In JL Vincent, et al (Eds.) Textbook of Critical Care, 6th Edition (Chapter 210, pp 1529-1542). Philadelphia

43. I have also made numerous presentations at National and International medical conferences that were relied upon and relevant to my declaration in this case, including:

- National Conference on Pediatric Trauma: Use of Hypertonic Saline in the Management of Severe Pediatric Brain Injury. Boston, MA Sep 1987;
- National Pediatric Critical Care Nursing Conference: San Diego, CA. Hyperosmotic Therapy and Use of 3% Saline for the Child with Head Injury. Oct 1988;
- 3rd World Congress on Pediatric Intensive Care: ICU Management has Altered Outcomes of Brain Injury Over the Past Decade (Debate Session) Montreal, Canada. Jun 24-29, 2000;
- Pediatric Academic Societies' Annual Meeting: Secondary Cerebral Swelling and the Use of Hypertonic Saline. Baltimore, MD Apr 28 – May 2, 2001;
- Society of Critical Care Medicine – 33rd Critical Care Congress: Hypertonic Saline for Cerebral Edema. Orlando, FL Feb 19-25, 2004;
- Critical Care Colloquium: Moderator and Panelist. ICU In-House 24-Hour Care. New York, NY Sep 30 – Oct 2, 2004;
- Scuola Internazionale di Scienze Pediatriche, Istituto Giannina Gaslini, Genova, Italy: Pathophysiology of Traumatic Brain Injury. Dec 6, 2006; and

- Society of Critical Care Medicine- 36th Critical Care Congress: Osmolar Therapy in Traumatic Brain Injury. Orlando, FL Feb 16-21, 2007.

Documents, Affidavit and Letters Reviewed

44. I have reviewed various medical records, documents, affidavits and letters prior to forming the opinions in this declaration. In forming my opinions, I relied on the following documents, all of which are fully incorporated herein:

- Southwestern Medical Center visit for consultation regarding pregnancy
- NICU discharge records; Dallas Children's Hospital
- 6/8/2016Ventriculoperitoneal Shunt Surgery
- Clearance for travel document
- After visit summary
- Outpatient records, Dr Nicholas Rich: 8/11/2016 – 5/20/2019;
- Follow up visit 8/11/2016 Pediatric Clinic Texas Tech;
- Hospital of Providence record for hospital admission for respiratory illness
- Hospital of Providence outpatient visit for education
- Southwestern follow-up note
- University of Southwestern Medical Center: Department of Neurologic Surgery outpatient visit 7/18/2018;
- All Imaging and laboratory data: The Hospital of Providence;
- All records from Providence Memorial Hospital
- Business records of Dr Jacob Hayden
- Business records of DrRoberto Canales
- Patient's records from El Paso Children's Hospital: 8/29/2019 – 9/5/2019;
- Sequence of events of I.S. Sanchez
- Sworn Affidavit of Dr Thomas Mayes
- Notes taken by Dr Mayes at meeting with Cindy Stout
- Notes taken by Dr Mayes at meeting with Dr Lange
- Letter from Dr Mayes to DR. Roberto Canales
- Medical Board Complaint filed by David Saucedo against Robert Canales MD;
- Communication with Dr Bert Johansson, Board Certified Intensivist
- Communication with Dr. Jorge Sanchez Board Certified Intensivist
- Review of CT and MRI, Brain 2016 – 2019;
- Chronology of events provided by patient's parents;
- Communications with Dr Berry Johanssen and Dr Jorge Sainz;

45. I also reviewed several expert sources in reaching my opinions and conclusion. Those sources are as follows:

- Slit Ventricles as a Neurosurgical Emergency: Case Report and Review of Literature, Zoltan Mencser; World Neurosurgery 30:493-498 Oct 2019.

- Single ventricle syndrome and early-onset secondary craniosynostosis in an infant Hyun Gee Ryoo, Seung-Ky Kim, et al, American J Case Rep. 2014 Jun 10.doi; 10.12659/AJCR.890590
- The pathophysiology of chronic noncommunicating hydrocephalus: lessons from continuous intracranial pressure monitoring and ventricular infusion testing JOURNAL OF NEUROSURGERY Kristian Eide MD, PhD, online publication date 11 August 2017.
- The Lack of Relationship Between Intracranial Pressure and Cerebral Ventricle Indices Based on Brain Computed Tomography in Patients Undergoing Ventriculoperitoneal Shunt: Act a Neurochir (2015 Feb;157(2):257-63 Eugene Kim 1, Young-Jin Lim, Han-Seul Park, Sung-Kwon Kim, Young-Tae Jeon, Jeong-Won Hwang, Yun-Seok Lee, Hee-Pyoung Park
- Conservative and Operative Management of Iatrogenic Craniocerebral Disproportion-A Case-Based Review: Thomas Beez, Christopher Munoz Bendix, etal. Child's Nervous System 2019 Jan:35(1) 19-27. doi; 10.1007/s00381=018-3981-9
- Published on The American Board of Pediatrics (<https://www.abp.org>) Eligibility Criteria for Certification in Pediatric Critical Care Medicine.
- Slit Ventricle Syndrome Leads to 10 Year History of Repetitive Transient Central Transient Central Herniation Masquerading as Seizures Hydrocephalus Case Report.
- Cerebrospinal Fluid Shunting Complications in Children. BW Hanak etal, Pediatric Neurosurgery 2017: 52(6) 381-400.
- The Slit Ventricle Syndrome: Advances Based on Technology and Understanding, Pediatric Neurosurgery. 2004, 40: 259-263.
- Essential Neurosurgery for Medical Students. Operativeneurosurgery-online.com, Joshua J Chen MD PhD, Volume 17/Number 2/ August 2019 Supplement.

Medical History and Pertinent Details of Medical Care
Facts Describing Treatment Received by I.S.

46. My review of the records in this case indicates the following summary of facts. These facts form the basis of my opinions in this report.

A. August 29, 2019

47. I.S. vomited for the first time, at 3:33 p.m. Dr Canales office was contacted at 3:52 p.m. An appointment was given for 5:20 pm. She vomited in the car on the way to the appointment at 5:07 pm.

48. She arrived at his office around 6:00 p.m. but was not seen until sometime after arrival. She was given Zofran for nausea and vomiting at 6:54 p.m. There is no indication that Dr. Canales appreciated I.S.'s condition given her medical history or even notated her prior medical history in diagnosing potential causes of illness.

49. After initially examining the patient, Dr Canales wanted her to stay in his office. She vomited again at 8:13 p.m. and 8:33 p.m. and remained lethargic. Dr Canales ordered her to go to the hospital at 8:34 pm. At 9:23 p.m. she was in the ED waiting room at EPCH. At 9:54 p.m. she was transferred to the peds floor room 974 on orders of Dr Canales. Other orders on the evening of August 29th by Dr Canales included blood work consisting of a comprehensive metabolic panel, CBC and a lactose free diet. She was described as awake but tired and lethargic on arrival to the pediatric floor.

50. Results of the CMP revealed a sodium of 140, CO2 of 21, osmoles of 292, glucose 125, and albumin 4.8. A CBC on the evening of August 29th revealed a MCHC 32.7, platelets 318,000, neutrophils abs 9.6 with 80% segs, and lymphocytes 1.9.

51. At 10:19 pm I.S. was wheeled to CT scan on the first floor. After CT head without contrast she was described as lethargic at 10:46 pm. It does not appear that hospital staff took any action in response to the CT scan. IV was started at 10:49.

52. CT was read by radiologist: FINDINGS: " Left frontal intraventricular catheter is reidentified with the tip at the left frontal horn. Findings are unchanged from prior. Again seen is marked asymmetric dilatation of the left ventricle, otherwise the ventricles are decompressed. Findings are also similar to prior.

53. No midline shift. The basal cisterns are patent."

54. IMPRESSION: Stable exam allowing for differences in technique. Stable ventricles. No evidence for hydrocephalus or shunt malfunction.

B. August 30, 2019

55. I.S. spit up 6 times on 6/30 between 12:20 am and 5:00 am. Of note SpO2 monitor was removed shortly after 6:06 am as I.S. had been taking it off. At 7:01 am Dr Canales called in an ondansetron order for nausea and vomiting. Her temperature was normal.

56. At 8:15 a.m. I.S. became limp and blue and was foaming at the mouth. When the sat monitor was replaced in read 32 with a heart rate of 168. A code was called. The PICU rapid response team arrived at 8:26 a.m. Patient was sedated with Versed, Ativan, and Rocuronium. Dr Chavez, Critical Care physician, intubated her on the first try at 8:37 a.m. and placed her on the

ventilator per Dr Baduku's recommendations. Patient loaded with Keppra and transferred to PICU at 8:46 a.m.

57. Dr Canales did not come to the hospital until August 30th, arriving at her bedside at 9:10 a.m., 44 minutes after a code had been called. Dr Canales gave orders to send a VBG, to continue iv fluids, to continue current ventilator settings, to consult Dr Fierro for neuro recommendations, and to place a foley catheter.

58. At 10:00 a.m. Dr Canales stated I.S. will wake up. Dr Canales wanted to order an EEG and then a CT. However, I.S.'s father demanded that the CT head be done first. Patient went for CT at 7:24 p.m.

59. CT head and CT angiogram were obtained. The CT showed loss of gray-white differentiation and compression of basal cisterns indicative of hypoxic ischemic injury compatible with markedly increased intracranial pressure. The CT angiogram revealed markedly attenuated intracerebral vessels. At 10:30 pm Sandra Saucedo RN, BSN (PACU recovery) asked what was going to be given (Mannitol) to reduce the cerebral swelling and possibly prevent or ameliorate the brain damage before it became permanent.

60. Dr Baduku nodded his head in agreement. But instead of administering Mannitol he started Vasopressin and Desmopressin (DDAVP). Rationale for this was that the patient had developed diabetes insipidus and was voiding very large amounts of urine.

61. Of note, I.S. was responding to pain throughout the day as she moved when her fingers were pinched. However, her moving throughout the day got less and less. During the day she became hypothermic and at some time during the day her pupils became fixed and dilated. When the Vasopressin was started 11:00 pm on 8/30 her serum sodium was 162-168. Serum sodium decreased to 143 within 8 hours and dropped further to 136.8 in another 4 hours most certainly increasing her ICP and decreasing any cerebral blood flow that she had at the time of the CT angiogram.

62. Dr Canales thought she had a "hypoxic stroke."

C. August 31, 2019

63. On the morning of August 31st, Dr Gupta, NS, was consulted. His exam at that time revealed fixed pupils at 4mm. Doll's eyes and cold caloric oculocephalic reflexes were not elicited. Corneal sensation was absent. She did not have a gag or a response to painful stimuli in upper extremities. She pulled away to painful stimuli in lower extremities. This most likely was a spinal reflex.

64. Dr Gupta tapped the shunt. There was no easy flow of CSF from the proximal catheter in spite of aspiration. Flow through the distal peritoneal catheter was good and reproducible. CT and MRI both demonstrated severe cerebral swelling compatible with diagnosis of severe global hypoxic ischemic injury. Both the NS and CC physician explained the grave situation to the parents.

65. Neuro exam including an apneic oxygenation test was consistent with brain death. Brain death was confirmed on 9/2/2019 with a nuclear medicine scan that documented absence of cerebral blood flow.

66. Patient was pronounced brain dead on September 1, 2019 by Dr Stevens and on September 2, 2019 by Dr Canales.

Standard of Care for Dr. Fiero-Stevens

A. Standard of Care for Treating Patients in the area of Pediatric Critical Care Medicine.

67. Dr. Stevens must comply with the standards of care required of medical professionals providing critical care to I.S.

68. Summarily, the standard of care is best described as the reasonable skill, expertise, and care possessed and practiced by physicians in the same or similar community and under similar circumstances. A doctor that fails to provide care consistent with actions that a reasonably skilled doctor would provide under the same or similar circumstances constitutes a violation of the standard of care. A determination of what constitutes “care consistent with actions of a reasonably skilled doctor under the same or similar circumstances” is a factual analysis that will change depending on the circumstances, symptoms, patient history, practice area, available resources, and countless other factors.

69. The purpose of this standard of care for this report is to determine whether EPCH’s medical staff acted in a manner consistent with the expectations of the medical community. If EPCH’s team failed to do what is expected of a medical professional in his or her field, the professional may be in a position to cause harm to the patient.

Dr. Stevens Violated the Standards of Care in Treating I.S.

70. Based on the foregoing, it is my professional opinion that Dr. Stevens violated the standards of care and caused the death of I.S. both generally and specifically as follows:

71. On August 30, 2019 at 2:49 p.m., Dr. Rodolfo Fierro-Stevens, a neurologist was consulted. As the attending neurologist, Dr. Steven was required to fully review the patient’s medical history and records in diagnosing I.S. 's condition. In my opinion, Dr. Stevens failed to fully review and appreciate the patients’ medical history. I reached this conclusion based on the symptoms exhibited by the patient and the patient’s clear medical history involving intracranial pressure.

72. I believe he reviewed her history, the findings on admission exam, and admission CT head. Her history of a ventriculoperitoneal shunt placed at 3 weeks of age and her symptoms of persistent emesis and lethargy on admission on 8/29/2019 are classic for increased intracranial pressure in a child who was shunted at 3weeks of age.

73. After admission to EPCH she had persistent emesis from 12:20 am until 5:00 am and about 8:05 am became apneic, cyanotic and flaccid. No tonic clonic activity was noted. A

code was called and she was intubated and subsequently transferred to the ICU where she was placed on mechanical ventilation. The symptoms of acute onset of apnea, bradycardia and flaccidity followed by posturing are classic for tonsillar herniation and not for a seizure.

74. Dr. Rodolfo Fierro-Stevens noted in addition to tonic posturing Ivanna had sluggish pupils to light on his exam, a sign of elevated ICP. He thought she would wake up and allow a better exam. He did not meet the standard of care for a board-certified neurologist as he should have suspected dangerously elevated intracranial pressure from the history of early shunting, and presenting complaints of persistent vomiting and lethargy on 8/29.

75. After her code he was proceeding with a diagnosis of a seizure even though he expressed doubts that it was “not typical”. The acute apnea and bradycardia were classic for acute tonsillar herniation secondary to increased ICP abetted by a mild Chiari condition.

76. Dr. Stevens fell below the standard of care as he missed the diagnosis thinking it was a seizure, never considering that her ICP was severely elevated and that she was herniating. He should have ordered a stat CT of her head and a stat neurosurgical consult and remained close to her bedside until the CT head result was obtained. (Of note a CT head would take about 5-10 minutes) Instead he left her bedside, did not notify neurosurgery, and a CT head was not obtained until 9 hours later. This was far below the standard of care and resulted in severe ischemic brain injury and her death, both of which could have been prevented if he would have acted appropriately in a timely matter.

77. For all of the foregoing basis and reasoning, it is my opinion that Dr. Stevens, in conjunction with her primary treating pediatric physician, Dr. Canales, caused the death of I.S. when they misdiagnosed the patient, failed to take reasonable steps to provide immediate care to I.S., failed to appreciate I.S.’s prior medical history and determine the patient’s condition based on the present symptoms, failed to take reasonable steps to treat the patient, and implemented an unsafe and dangerous pediatric critical care program at El Paso.

78. I declare under penalty of perjury that the foregoing is true and correct.

79. Executed in San Diego, California, on the 25th day of May, 2020.



Dr. Bradley Peterson, M.D.

BRADLEY M. PETERSON, M.D.

CURRICULUM VITAE

Office Address: 3030 Children's Way
Suite 115
San Diego, CA 92123

Home Address: Post Office Box 1055
Rancho Santa Fe, California 92067

Positions:

2014-Present Senior Consultant – Pediatric Critical Care
Rady Children's Hospital – San Diego

1978-Present Medical Director, Transport Services
Rady Children's Hospital – San Diego

1985-2017 Medical Director, Critical Care Fellowship Program
Rady Children's Hospital – San Diego

1978-2014 Medical Director, Pediatric Intensive Care Units
Children's Hospital and Health Center – San Diego

1984-2008 Associate Director, Trauma
Children's Hospital and Health Center – San Diego

Senior Staff, Pediatrics and Anesthesia
Children's Hospital and Health Center – San Diego

Associate Clinical Professor, Pediatrics
Anesthesia and Surgery – UCSD San Diego

Education:

University: BA, Northwestern University
Evanston, Illinois 1962-1966

M.D., Northwestern University
Chicago, Illinois 1966-1970

Post Graduate Education:

Internship: University of Minnesota (Pediatrics)
1970-1971

Residency: University of Minnesota (Pediatrics)
1971-1972

U.S. Naval Hospital, San Diego, CA (Pediatrics)
1972-1973

Fellowship: Children's Hospital, San Diego, CA (Neonatology)
1973-1975

Stanford University, Stanford, CA (Anesthesiology)
1975-1977

Military Service: U.S. Naval Hospital, San Diego, CA
(Staff Pediatrician)
1972-1973

Medical Licensor: California G 21961

Board Certification: American Board of Pediatrics, 1976
American Board of Anesthesiology, 1981
Pediatric Critical Care, 1987, Re-certification 1994, 2003, 2012

Other Certifications: PALS
ACLS
ATLS - Instructor

Membership in Societies:

Member, Editorial Board of Pediatric Critical Care Medicine
Fellow, American College of Critical Care Medicine
American Society of Anesthesiology
California Society of Anesthesiologists
American Medical Society
Fellow, American Academy of Pediatrics
San Diego County Medical Society
Society of Critical Care Medicine
Southern California PICU Network
Education Committee, Southern California PICU Network
Society for Pediatric Trauma
American Academy of Pediatrics- Transport Medicine Section
Pediatric Critical Care Colloquium Steering Committee

Honors and Awards:

American Heart Association Scholar
BBB Biological Honorary - 1966
UCSD - Senior Pediatric Residents Clinical Teaching Award -1986
Poster Presentation Critical Care Society - Outstanding
Presentation for Clinical Research – 1989
Society of Critical Care Medicine National Meeting
Best Clinical Study – 1989
Society of Critical Care Medicine
Educational Scholarship Award - 1998
San Diego County Medical Society - Outstanding
Contributions in delivery of Emergency Care - 1990
America's Best Doctors - 1993
America's Best Doctors – 1999
San Diego "To Doctors" for 2006, 2007, 2008,2009,2010,2012
RCHSD Award for Outstanding Excellence in Critical Care

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Dr. Bradley Peterson established San Diego's first pediatric critical care unit, transport and trauma team. He is considered among the father's of modern pediatric critical care medicine and has dedicated his life to caring for critically ill children.

The Bradley Peterson Pediatric Critical Care Fellowship Program has trained and graduated 67 fellows.

Name placed on Helicopter used for Transport of Critical Pediatric Patients

For his dedication and effort to establish a transport system
Serving all critically ill and injured children in SD County



TEACHING:

Anesthesia at Senior Resident Level –1978-1984 in O.R.
Pediatric Critical Care PGY4-PGY 6 Level at bedside 1977-2019
Didactic Weekly Pediatric Critical Care Conference 1984-2019
Chairman, PICU Morbidity and Mortality Conference 1978-2019
Co-Chairman -Trauma Morbidity and Mortality Conference 1984 – 2004
Chairman Transport Morbidity and Mortality Conference 1985-2019

EXHIBIT 4

PUBLICATIONS:

1. Peterson B: Morbidity of childhood near drowning. Pediatrics. March 59(3): 364-370, 1977
2. Peterson B: Balloon directed pulmonary blood flow. Critical Care Medicine. July 9(7): 540-3.
3. Peterson B, Frankel L, Anas N, Perkin R, Seid AB, and Park SM: Use of the anterior cricoid split operation in infants with acquired subglottic stenosis. Critical Care Medicine. April 12 (4), 395-8, 1984
4. Peterson B: Guidelines for pediatric intensive care units. Critical Care Medicine, Vol. 11, No 9, 753, 1983
5. Peterson B, Lodge FA, Lamberti JJ, Winkler M, et al. Blood conservation during open-heart surgery in infants and children. The Journal of Extra-Corporeal Technology, Vol. 16, No 4, 1984
6. Kimmons HC and Peterson B: Management of acute epiglottitis in pediatric patients. Critical Care Medicine, Vol. 14, No 4, 1986
7. Murphy JL, Reznik VM, Mendoza S, Peterson B, et al. Use of a guide-wire inserted catheter for acute peritoneal dialysis in children. International Journal of Pediatric Nephrology, Oct-Dec; 8(4): 199-202. 1986
8. Hurt TL, Fisher B and Peterson B: Mandibular fractures in association with chin trauma in pediatric patients. Pediatric Emergency Care, June 1987
9. Wilson N, Ochs HD, Peterson B, et al: Abnormal primary antibody responses in pediatric trauma patients. Journal of Pediatrics, September 1989
10. Murphy J, Hurt TL, Peterson B, et al: Interference with creatinine concentration measurement by high dose furosemide infusion. Critical Care Medicine, September 1989
11. Fisher B, Zornow MH, Yaksh TL, and Peterson B: Antinociceptive properties of intrathecal dexmedetomidine in rats. European Journal of Pharmacology, June 1991
12. Wilson NW, Gooding A, and Peterson B, et al: Anergy in pediatric head trauma patients. American Journal of Diseases in children. Vol. 145(3):326-9. March 1991
13. Reznik VM, Griswold WR, Peterson B, et al: Peritoneal dialysis for acute renal failure in children. Pediatric Nephrology, November 5(6) 715-7. 1991

14. Seid AB, Godin MS, Pransky SM, Kearns DB, and Peterson B: The prognostic value of endotracheal tube-air leak following tracheal surgery in children. Arch Otolaryngol Head Neck Surg Vol. 117(8): 880-2. August 1991
15. Bradley JS, Schlievert PM, Peterson B: Toxic shock-like syndrome, a complication of strep throat. Letter to the Editor. The Pediatric Infectious Disease Journal Vol. 10(10): 790. October 1991
16. Fisher B, Thomas D, and Peterson B: Hypertonic saline lowers raised intracranial pressure in children after head trauma. Journal of Neurosurgical Anesthesiology Vol. 4(1): 4-10. January 1992
17. Fisher B, Peterson B, Hicks G: Use of brainstem auditory-evoked response testing to assess neurologic outcome following near drowning in children. Critical Care Medicine, May; 20(5): 578-585. 1992
18. Spear RM, Chadwick D, Peterson B: Fatalities associated with misinterpretation of blood cerebrospinal fluid in the "shaken baby syndrome." Am J Dis Child 146:1415-1417, 1992
19. Sheehan PB, Zornow MH, and Peterson B: The effects of fentanyl and sufentanil on intracranial pressure and cerebral blood flow in rabbits with an acute cryogenic brain injury. Journal of Neurosurgical Anesthesiology Vol. 4, No 4, October 1992
20. Mendoza SA, Griswold, Peterson B, et al: Acute peritoneal dialysis in critically ill infants and children. Dialysis and Transplantation, Vol. 22, No 3, March 1993
21. Reznik VM, Griswold WR, Randolph G. Peterson B, et al: Cost analysis of dialysis modalities for pediatric acute renal failure. Peritoneal Dialysis International, 13(4): 311-3. 1993
22. Goulin GD, Duthie Se, Zornow MH, Scheller MS, and Peterson B: Global cerebral ischemia: Effects of pentastarch following reperfusion. Anesthesiology, June 1993
23. Gooding AM, Bastian JF, and Peterson B, Wilson NW: Safety and efficacy of intravenous immunoglobulin prophylaxis in pediatric head trauma patients: A double blind controlled trial. Journal of Critical Care Medicine, December 1993
24. Gooding AM, Bastian JF, Peterson B, Wilson NW: Immunoglobulins and IgG subclasses in children following severe head injury. Intensive Care Medicine, July 1993
25. Reznik V, Peterson B, and Lemire JM: Optimizing acute peritoneal dialysis in children: The use of peritoneal equilibration curves. Dialysis and Transplantation, January 1994

EXHIBIT 4

26. Duthie S, Goulin GD, Zornow M, Scheller M, Peterson B: The effects of THAM and sodium bicarbonate on intracranial pressure and mean arterial pressure in an animal model of focal cerebral injury. *Journal of Neurosurgical Anesthesiology*, January 1994
27. Grossed P, Peterson B, Griswold W, and Reznik V: Hemolytic uremic syndrome associated with pneumococcal pneumonia. *Pediatrics*, April 1995
28. Paulson T, Spear R, and Peterson B: New concepts in the treatment of children with acute respiratory distress syndrome. *Journal of Pediatrics*, Vol. 127, No 2, August 1995
29. Zuhdi M, Spear R, and Peterson B: Fatal air embolism as a complication of lung pneumatoceles in an infant with staphylococcal pneumonia. *The Pediatric Infectious Disease Journal*. 14(9) 811-2. September 1995
30. Duthie S, Peterson B, Cutler J: Successful organ donation in victims of child abuse. *Clinical Transplantation*, Vol 9(5), 415-418. October 1995
31. Zuhdi M, Spear R, Worthen HM, and Peterson B: Percutaneous catheter drainage of tension pneumatocele, secondarily infected pneumatocele, and lung abscess in children. *Critical Care Medicine*. 24(2): 330-3. February 1996
32. Turlapati K, Spear RM, and Peterson B: Percutaneous mediastinal tube placement for pneumomediastinum in children: Hemodynamic response and description of technique. *Critical Care Medicine*, Vol. 24 No 7, 1257-60. July 1996
33. Paulson T, Spear R, Silva T, and Peterson B: High frequency pressure control ventilation in children with acute respiratory distress syndrome. *Journal of Pediatrics*, October 1996
34. Khanna S, Spear RM, Peterson B, Bradley J, Soumekh B, Billman G, Kearns, D: A case of fatal rhinocerebral mucormycosis with new onset diabetic keto-acidosis. *Journal of Diabetes and Its Complications* 12(4):224-227, Jul-Aug 1998
35. Gross M, Spear R, and Peterson B: Helium-oxygen mixture decreases intrapulmonary shunting in mechanically ventilated children with bronchiolitis. *Critical Care Forum* Vol. 4 No. 3 pp188, May 2000
36. Stephanopoulos DE, Monge R, Schell K, Wyckoff P, and Peterson B: Continuous intravenous terbutaline for pediatric status asthmaticus. *Critical Care Medicine* Vol. 26, No. 10, 1998

EXHIBIT 4

37. Gross M, Lynch F, Canty T, Peterson B, and Spear R: Management of pediatric liver injuries: A thirteen year experience at a Pediatric Trauma Center. *Journal of Pediatric Surgery*, Vol. 34, No 5, May 1999
38. Schechter R, Peterson B, McGee J, and Idowu O, Bradley J: *Clostridium difficile* colitis associated with infant botulism: Near fatal case analogous to Hirschsprungs enterocolitis. *Clinical Infectious Diseases Journal*, 29(2): 367-74, August 1999
39. Peterson B and Khanna S: Prolonged hypernatremia controls elevated intracranial pressure in head injured patients. *Critical Care Medicine*, 28(4): 1136-43, April 2000
40. Khanna S, David D, Peterson B and Fisher B: Use of hypertonic saline (3% NaCl) in the treatment of severe refractory posttraumatic intracranial hypertension in pediatric traumatic brain injury. *Critical Care Medicine*, 28(4): 1144-51, April 2000
41. Akhtar J, Peterson B and Spear RM: Detection of traumatic brain injury with MRI and S-100 Protein in children despite a normal computer tomography of the brain. *Pediatric Critical Care Med*. Vol. 4. No 3. 391-2. July 2003
42. O'Brien N, DeMott MC, Suchard JR, Clark RF and Peterson B: Recurrent coagulopathy with delayed significant bleeding after crotaline envenomation. *Pediatric Emergency Care*. 25(7) 457-9, July 2009
43. Rafaat K, Spear R, Kuelbs C, Parsapour K and Peterson B: Cranial computed tomographic findings in a large group of children with drowning: Diagnostic, prognostic and forensic implications. *Pediatric Critical Care Medicine*. 2008 Nov;9(6): 567-72
44. O'Brien NF; Reuter-Rice KE; Khanna S; Peterson BM; Quinto KB: Vasospasm in children with traumatic brain injury. *Intensive Care Med* (2010) Apr; 36(4): 680-7
45. Niedner MF, Foley J, Riffenburgh RH, Bichell DP, Peterson BM and Rodarte A: B-Type natriuretic peptide in children: Perioperative patterns in Congenital Heart Disease. *Congenital Heart Disease* 5(3):243-255, May/June 2010
46. Swanson CA, Burns JC, Peterson BM. Low plasma D-dimer concentration predicts the absence of traumatic brain injury in children. *J Trauma*. 2010 May; 68(5):1072-7
47. Colasacco C, Worthen M, Peterson B, Lamberti J, Spear R: Near-infrared spectroscopy monitoring to predict post-operative renal insufficiency following repair of congenital heart disease. *World Journal for Pediatric and Congenital Heart Surgery* 2011; 2(4): 536-540

EXHIBIT 4

48. Gonda DD, Meltzer HS, Crawford JR, Hilfiker ML, Shellington DK, Peterson BM, and Levy ML: Complications associated with prolonged hypertonic saline therapy in children with elevated intracranial pressure. *Pediatric Critical Care Medicine*. 2013; 14 (6): 610-620
49. Reuter-Rice KE, Peterson BM. Conventional and Unconventional Life-saving Therapies in an Adolescent with Amlodipine Ingestion. *Crit Care Nurse*. 2016 Aug; 36(4):64-9. doi: 10.4037/ccn2016524. PMID: 27481803

Abstracts:

1. Peterson B, Frankel LR: Intracranial pressure monitoring in pediatric head trauma. *Clinical Research Volume 32 #1, 116A* February 1984
2. Peterson B, Frankel LR: Non-accidental head injury in the pediatric patient: The use of intracranial pressure monitoring. *Clinical Research Volume 32 #1, 116A* February 1984
3. Scheller J, Peterson B, Trauner D, et al: Computed tomographic scans, Glasgow coma scale, and Outcome in childhood head trauma. *Annals of Neurology Volume 22 #3, September 1987*
4. Wilson N, Peterson B. et al: Alterations of cellular immunity in children after major trauma. *American College of Allergy, Boston, Nov. 1987; Journal of Allergy and Clinical Immunology, March 1988*
5. Lindsay JN, Rodarte A, and Peterson B, et al: Reduced staffing of a pediatric trauma center at night. *Annals of Emergency Medicine, 17:4, April 1988*
6. Wilson NW, Wu YP, Peterson B, et al: Selective IgG Subclass deficiency in pediatric head trauma patients. *Society for Pediatric Research, Washington, DC, May 1989*
7. Peterson B, Waltz T, et al: Use of hypertonic saline in the management of severe pediatric brain injury. *Journal of Emergency Medicine, June 1988*
8. Fisher B and Peterson B: Prospective study utilizing hypertonic saline to control raised intracranial pressure in children after head trauma. *The National Conference on Pediatric Trauma, Ann Arbor, Michigan, September 1989*
9. Mason J, Lynch F, Peterson B and Kitchen L: Cervical spine injuries in children. A four-year experience at a Pediatric Trauma Center. *The National Conference on Pediatric Trauma, Ann Arbor, Michigan, September 1989*

10. Reznik VM, Griswold WR, Peterson B, et al: Acute renal failure (ARF) in children: Is peritoneal dialysis (PD) the treatment of choice? The American Pediatric Society - The Society for Pediatric Research, January 1990
11. Park GS, Peterson B, Bradley JS: A simple prognostic score in acute meningococemia. Presented at the Pediatric Critical Care Colloquium, Waterville Valley, NH, October 1990
12. Sample TG, Spear RM, Peterson B: Blunt abdominal trauma in children: Correlation of serum alanine aminotransferase values with computer tomographic findings of hepatic injury. First World Congress of Pediatric Intensive Care, Baltimore, MD, June 1992
12. Stephanopoulos D, Mainwaring R, and Peterson B: Pediatric cardiac contusions: An 8-year retrospective review. National Conference on Pediatric Trauma, Indianapolis, IN, September 1992
13. Paulson TE, Spear RM, and Peterson B: Improved survival using high frequency pressure control ventilation with high PEEP in children with ARDS. (Presented at Sixth Pediatric Critical Care Colloquium, Philadelphia, PA, March 1993
14. Paulson TE, Spear RM, and Peterson B: Improved survival using high frequency pressure control ventilation with high PEEP in children with ARDS. Crit Care Med 21:S290, (Presented at meeting of Society of Critical Care Medicine, New York, NY, June 1993
15. Stephanopoulos D, Spear RM, Bradley J, and Peterson B: Peptic ulcer perforation in Neonates with dexamethasone adjuvant therapy for gram-negative bacillary meningitis. 93rd Meeting of American Society for Microbiology, Abstract A-54, Atlanta, 1993
16. Stephanopoulos D, Peterson B: Atrial natriuretic factor release in pediatric head injury patients causing clinically significant hyponatremia. Seventh Pediatric Critical Care Colloquium. Seattle, WA October 26-29, 1994
17. Zuhdi M, Spear RM, Worthen HM, and Peterson B: Percutaneous catheter drainage of infected pneumatocele and lung abscess in children. (Presented at meeting of Society of Critical Care Medicine, San Francisco, CA, February 1995)
18. Pautler M, Senac M, Spear RM, Peterson B: Delayed diagnosis of congenital Diaphragmatic hernia simulating pneumonia with empyema. (Presented at meeting of Society of Critical Care Medicine, San Francisco, CA February 1995)

EXHIBIT 4

19. Zuhdi M, Spear RM, and Peterson B: Management of respiratory failure in children with myasthenia gravis. (Presented at meeting of Society of Critical Care Medicine, San Francisco, CA, February 1995)
20. Turlapati KM, Spear RM, Peterson B: Mediastinal tube placement in children: Hemodynamic changes and description of technique. (Presented at meeting of Society of Critical Care Medicine, San Francisco, CA, February 1995)
21. Yu HC, Zuhdi M, Spear RM, and Peterson B: Complications of bedside pulmonary artery catheter in children. (Presented at the Eighth Pediatric Critical Care Colloquium, Sea Island, Georgia, October 1995)
22. Stephanopoulos D, Schell K, Wyckoff P and Peterson B: High dose intravenous terbutaline in pediatric status asthmatics. (Oral presentation at the Eighth Annual Pediatric Critical Care Colloquium, Sea Island, Georgia, October 11, 1995)
22. Monge R, Spear RM, Peterson B, Zuhdi M: Low incidence of complications from percutaneous subclavian central venous catheter insertion in infants and children less than 2 years of age. (Poster presentation at the Ninth Annual Pediatric Critical Care Colloquium, Milwaukee, Wisconsin, September 1996)
23. Yu HC, Spear RM, Mullany JP, and Peterson B: Dose-response of inhaled nitric oxide (INO) in children with severe acute lung disease. (Presented at the Ninth Annual Pediatric Critical Care Colloquium, Milwaukee, Wisconsin, September 1996)
24. Nemerson SF, Mullany JP, and Peterson B: The fastrac method for securing endotracheal tubes in the Pediatric Intensive Care Unit. (Poster presentation at the 7th World Congress of Intensive and Critical Care Medicine, Ottawa, Canada, July 1997)
25. Fagan M, James HE, and Peterson B: Results of intracranial pressure monitoring: A clinical report on methods employed in the 1996 year and future projections. (Poster presentation at the Tenth Annual Pediatric Critical Care Colloquium, Hot Springs, Arkansas, September 1997)
26. Khanna K, Fisher B, Peterson B: Prolonged Hyponatremia Safely Controls Elevated Intracranial Pressure in Pediatric Head Injury Patients. (Poster presentation at the Society of Critical Care Medicine, 27th Educational and Scientific Symposium, San Antonio, Texas February 2-8, 1998)
27. Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3%NaCl) in the Treatment of Resistant Intracranial Hypertension in Pediatric Head Injured Patients. (Oral presentation to the Section on Critical Care of the American Academy of Pediatrics, San Francisco, CA October 1998)

EXHIBIT 4

28. Gross M, Lynch F, Canty T, Peterson B, and Spear R: Management of Pediatric Liver Injuries: A thirteen-year experience at a Pediatric Trauma Center. (Oral presentation at the 50th anniversary meeting of the Surgical Section of the American Academy of Pediatrics, San Francisco, CA October 1998)
29. Powel V, Peterson B, Griswold W: Continuous Venovenous Hemodiafiltration with Citrate Anticoagulant in Critical Ill Pediatric Patients. (Poster presentation at the Society of Critical Care Medicine, San Francisco, CA January 1999)
30. Khanna S, Davis D, Fisher B, Peterson B: Use of Hypertonic Saline (3% NaCl) in the Treatment of Severe Refractory Posttraumatic Intracranial Hypertension in Pediatric Head Injured Patients. (Poster presentation at Society of Critical Care Medicine, San Francisco, CA January 1999) Paper received 1998 Educational Scholarship Award.
31. Gross M, Spear R, and Peterson B: Helium-oxygen mixture decreases intrapulmonary shunting in mechanically ventilated children with bronchiolitis. (Presented at Society of Critical Care Medicine's 28th Educational and Scientific Symposium, San Francisco, CA. January 1999)
32. Franzon D, Duthie S and Peterson B: Comparing calf blood pressure measurements with direct arterial measurements in a pediatric intensive care unit. (Presented at the Fourteenth Annual Pediatric Critical Care Colloquium, San Diego, CA October 2-5,2002)
33. Parsapour K, Fathi A, Rafaat K and Peterson B: 3% Hypertonic saline may improve concussive symptoms. (Poster presentation at the SCCM Critical Care Congress, San Francisco, CA, January 2006) Critical Care Medicine. December 2005; 33(12):A49 (183-S)
34. Parsapour K, Fathi A, Rafaat K and Peterson B: 3% Hypertonic saline may improve concussive symptoms: (Oral presentation at the 16th Pediatric Critical Care Colloquium, Snowbird, Utah, February 2006) Pediatric Critical Care Medicine. Abstract Translations 7(5): 514, September 2006
35. Fathi A, Parsapour K, Rodarte A, and Peterson B: Aerosolized Prostacyclin (PGI₂) vs. Inhaled nitric oxide (iNO) in acute respiratory distress syndrome in pediatric patients: A randomized controlled pilot trial. (Poster presentation at the 16th Pediatric Critical Care Colloquium, Snowbird, Utah, February 2006) Pediatric Critical Care Medicine. Abstract supplement 7(5) 507, September 2006
36. Colasacco C, Worthen M, Peterson B, Lamberti J and Spear R: Near-infrared spectroscopy (NIRS) monitoring predicts post-operative renal insufficiency following repair of congenital heart disease. Poster Presentation at the 37th Critical Care Congress in Honolulu, Hawaii, February 2-6, 2008. Critical Care Medicine. Abstract Supplement: 35(12) A87, December 2007

EXHIBIT 4

37. Rafaat K and Peterson B: Computed tomographic findings in a large group of children with near-drowning. Poster Presentation at the 37th Critical Care Congress in Honolulu, Hawaii, February 2-6, 2008. Critical Care Medicine. Abstract Supplement 35(12) A176, December 2007
38. Khanna S, Mauro M, Foley J, Peterson B, Spear R and Estarziou M. Elevation of serum magnesium concentration with continuous infusion has no major adverse hemodynamic effects in children with traumatic brain injury. Presented at the 17th Annual Pediatric Critical Care Colloquium, Whistler BC, February 2008. Pediatric Critical Care Medicine. Abstract Supplement: 9(3): 357, May 2008
39. Murdock-Vlautin T, Peterson B, Foley J, Riffenburgh R: Helium-Oxygen Gas as an Adjuvant Therapy in Pediatric Patients with Acute Respiratory Distress Syndrome. Poster presentation at the 17th Annual Pediatric Critical Care Colloquium, Whistler BC, February 2008. Pediatric Critical Care Medicine. Abstract Supplement: 9(3): 358, May 2008
40. Mannheimer A, Foley J, Khanna S, Lamberti J, and Peterson B: Does Mannitol decrease cerebral venous congestion and post-operative irritability in Pediatric Bi-Directional Cavopulmonary Shunt Patients? Poster Presentation at Cardiology 2009 in the Bahamas, February 2009
41. Swanson C, Burns J, and Peterson B: Low plasma d-dimer predicts the absence of brain injury in children. Poster presentation at the Canadian Critical Care Conference, Whistler, BC, February 2009
42. Swanson C, Burns J, and Peterson B: D-dimer and brain injury in children: Clinical implications. Poster Presentation at the American Thoracic Society Conference. San Diego, CA. May 2009. Am J Respir Crit Care Med 179, 2009: A1609
43. Recalde F, Fisher B, Spear, R, Peterson B: Serum D-Dimer Level Predicts Absence of Significant Brain Injury After Trauma In Children. Poster presentation at the American Academy of Pediatrics National Conference and Exhibition. Boston, MA October 15-18, 2011.
44. Frugoni B, Khanna S, Bush R, Peterson B, Shellington D: Endotracheal Tube Exchange in Pediatric Patients after Transfer from Non-Pediatric Facilities. Poster presentation at the Society of Critical Care Medicine, 42nd Critical Care Congress, San Juan, Puerto Rico, January 19-23, 2013. Critical Care Medicine. 40(12):445, December 2012.
45. Harvey H, Malicki D, Bush R, Hilfiker M, Peterson B, Shellington D: Thromboelastography Reveals Abnormalities Not Detected on Traditional Coagulation Studies After Pediatric Traumatic Brain Injury. Poster presentation at the Society of Critical Care Medicine, 42nd Critical Care Congress, San Juan, Puerto Rico, January 19-23, 2013. Critical Care Medicine. 40(12):227, December 2012

EXHIBIT 4

46. Bui PN, Foley J, Lamberti J, Nigam V; Vaughn G, Peterson B, Duthie S, Shellington D. Intracranial Hemorrhage After Cardiopulmonary Bypass for Correction of Congenital Heart Disease. Poster presentation at the Society of Critical Care Medicine, 44th Critical Care Congress, Phoenix, AZ, January 17-21, 2015. Crit Care Med 42(12) (Supplement 1): A1499, December 2014.
47. Kim A, Foley J, Kantor E, Hilfiker M, Peterson B, Shellington D. Secondary Brain Insults During Interfacility Transport After Pediatric Traumatic Brain Injury. Poster presentation at the Society of Critical Care Medicine, 44th Critical Care Congress, Phoenix, AZ, January 17-21, 2015. Crit Care Med 42(12) (Supplement 1): A1499, December 2014.
48. Harvey H, Duthie S, Cannavino C, Hilfiker M, Peterson B, Shellington D. Infectious complications after open, depressed skull fractures do not vary with choice of antibiotic prophylaxis regimen. Poster presentation at the 2015 Surgical Infection Society meeting in Westlake Village, CA, April 15 – 18, 2015. Surgical Infections. Apr 2015, 16(S1): S-33, p. 41
49. Guardenier, A, Hilfiker M, Peterson B, Shellington D. 1261: Acute Paraplegia after Minor Trauma due to Artery of Ademkiewicz Thrombosis. Poster presentation at the Society of Critical Care Medicine, 45th Critical Care Congress, Orlando, FL. Feb 20-24, 2016. Crit Care Med 43(12) (Supplement 1):317, December 2015
50. Guardenier A, Peterson B, Hilfiker M, Shellington D. 1170: Acute Renal Failure in Pediatric Patients after Moderate to Severe Traumatic Brain Injury. Poster presentation at the Society of Critical Care Medicine, 45th Critical Care Congress, Orlando, FL. Feb 20-24, 2016. Crit Care Med 43(12) (Supplement 1):294, December 2015
51. Law W, Duthie S, Peterson B, Shellington D. 395: Acquired Antithrombin 3 Deficiency in Pediatric Patients with Peritoneal and Pleural Drainage. Poster presentation at the Society of Critical Care Medicine, 45th Critical Care Congress, Orlando, FL. Feb 20-24, 2016. Crit Care Med 43(12) (Supplement 1):100, December 2015

Book Chapters:

1. Chadwick DL and Peterson B: Evaluating Critically Ill and Injured Children for Intentional Injury. In: Bradley P. Fuhrman and Jerry J. Zimmerman. *Pediatric Critical Care*. St. Louis, Missouri: Mosby-Year Book, December 1991

2. Moulton S, Lynch F and Peterson B: Decision making and Trauma Management: A team approach. Chapter: Resuscitation of the pediatric trauma victim. In: Mancini B, Klein J, eds. Philadelphia: BC Decker, 1991
3. Peterson B and Hurt T: Vascular access and monitoring of the critically injured child. Textbook of the Management of Pediatric Trauma. William L. Buntain, MD (editor) W.B. Saunders, December 1993
4. Peterson BM, Chadwick DL. Evaluating critically ill and injury children for intentional injury. 2nd Edition – In: Bradley P. Fuhrman and Jerry J. Zimmerman. *Pediatric Critical Care*. 2nd Ed. Chapter 7. St. Louis, Missouri: Mosby-Year Book; 1998.
5. Peterson B and Duthie S: Chapter 248 - Pediatric Trauma, Textbook of Critical Care, 5th Edition. Edited by Fink, et al. 2005
6. Peterson B, Duthie S. Pediatric Trauma. In JL Vincent, et al (Eds.), Textbook of Critical Care, 6th Edition (Chapter 210, pp 1529-1542). Philadelphia: Elsevier Saunders, 2011
7. Nathalang D, Peterson B, Pulmonary Edema. In: *Textbook of Clinical Pediatrics, 2nd Edition*. Edited by AY Elzouki, HA Harfi and H Nazer, FB Stapleton, W Oh, RJ Whitley. Springer-Verlag Berlin and Heidelberg GmbH & Co. K, pp. 2163-2170, 2012.

Presentations: Regional/National/International

Morbidity of Near Drowning, Western Society of Pediatric Research, Carmel, CA, May 1975

American Academy of Pediatrics, Section on Anesthesia and Critical Care, Cerebral Resuscitation of Near Drowning Victims, April 1977

Hospital for Sick Children, Toronto, Canada, Conference on Cerebral Resuscitation, November 1981, Cerebral Resuscitation in Near Drowning

Internal Conference on Pediatric Surgical Care, Mexico. Treatment of Septic Shock in Children, 1980, Medical, Mexico

San Diego-Tijuana Binational Pediatric Conference, Septic Shock, 1982

Federation of Western Societies of Neurological Science. Management of Pediatric Head Injury, San Diego, CA, February 1985

American Association of Critical Care, San Diego, CA. Near Drowning, May 1985

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Coconino County Medical Society, Flagstaff, Arizona
Acute Head Injuries 1985
Near Drowning 1985

American Academy of Pediatrics Spring Meeting, Orlando Florida.
Directed seminar on Intensive Care, April 1986

California Health Service Conference: Current trends in childhood injuries and strategies for Drowning Prevention in California, Pediatric Trauma Care System. Sacramento, CA, September 1986

National Pediatric Trauma Conference 1986: The Practice and the Controversies:
Panel: ICU Determinants of Mortality and Morbidity
Panel: Head Injury in Children
Panel: Controversies in Pediatric Resuscitation: Complications of Central Venous Lines.
San Diego, CA, September 1986

Meeting of the American Academy of Pediatrics, Washington, DC
Directed seminar on Intensive Care, November 1986

National Conference on Pediatric Trauma: Use of Hypertonic Saline in the management of Severe Pediatric Brain Injury. Boston, Ma, September 1987

The Critical Link Conference: Children's Hospital-Los Angeles and Children's Hospital-San Diego: Cerebral Resuscitation, San Diego, CA, May 1988

National Pediatric Critical Care Nursing Conference: San Diego, CA. Hyper osmotic therapy and use of 3% saline for the child with head injury. October 1988

Society of Critical Care Meeting: Pediatric Critical Care Review Series - Part I. Anoxic Encephalopathy - Near Drowning. New Orleans, LA, June 1989

Poster Presentation: Determination of neurological recovery by brainstem auditory evoked responses after near drowning in children. (Selected as best clinical research)
New Orleans, LA, June 1989

Pediatric Critical Care Colloquium: Waterville Valley, NH. A simple prognostic score in acute meningococemia. October 1990

American Academy of Pediatrics - Spring Session. Chair, Pathophysiology and Management of Trauma. San Diego, CA, March 1991

American Academy of Pediatrics - Spring Session. Prognosis in Near Drowning. San Diego, CA. March 1991

EXHIBIT 4

XXVII Congreso Nacional de Cirugia Pediatrica. Resuscitation of the Trauma Patient. (Resucitacion del paciente traumatizado) Tijuana, B.C.N. September 1994

Emergency Medical Services: Vision for Tomorrow - A model for emergency and critical care services for children. Panel: Specialized Centers (PCC, PTC, GTC and Rehab) San Francisco, CA. April 1995

10th Annual California Trauma Conference: Managing Head Injured Children – The Pediatric Intensivist. Catamaran Resort Hotel, San Diego, CA. January 14, 2000

3RD World Congress on Pediatric Intensive Care: ICU Management Has Altered Outcomes of Brain Injury Over the Past Decade (Debate Session) Montreal, Canada. June 24-29, 2000

3rd World Congress on Pediatric Intensive Care: Traumatic Injury of Brain: Management Strategies (Workshop Session) Montreal, Canada. June 24-29, 2000

Pediatric Academic Societies' Annual Meeting: Secondary Cerebral Swelling and the Use of Hypertonic Saline. Baltimore, Maryland, April 28 – May 1, 2001

First San Diego Pediatric Trauma Conference: Moderator and Panelist. Encephalopathy, Cerebrovascular and Others) - San Diego, California. October 2-5, 2002

First San Diego Pediatric Trauma Conference: Trauma Session II: Management of the Critically Injured Child. Critical Care of the Pediatric Trauma Patient – A Critical Care Physician's Perspective. San Diego, California. October 2-5, 2002

Society of Critical Care Medicine – 33rd Critical Care Congress: Hypertonic Saline for Cerebral Edema. Orlando, Florida, February 19-25, 2004

Critical Care Colloquium: Moderator and Panelist. ICU In-House 24-Hour Care. New York, New York. October 2004

Society of Critical Care Medicine – 33rd Critical Care Congress: Hypertonic Saline for Cerebral Edema. Orlando, Florida February 19-25, 2004

Critical Care Colloquium: Moderator and Panelist. ICU In-House 24-Hour Care. New York, NY. September 30-October 2, 2004

Scuola Internazionale di Scienze Pediatriche, Istituto Giannina Gaslini, Genova Italy: Pathophysiology of Traumatic Brain Injury. December 6, 2006

Society of Critical Care Medicine – 36th Critical Care Congress: Osmolar Therapy in Traumatic Brain Injury. Orlando, Florida, February 16-21, 2007

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Presentations: Local

University of California, San Diego. Invasive Monitoring in Pediatrics, 1980

University of California, San Diego. Intensive Care for Neurological Injuries and Head Trauma in Children, June 1981

University of California, San Diego. Conference on Neurological Intensive Care, December 1981

University of California, San Diego. Pediatric Grand Rounds

Near Drowning 1975

Adult Respiratory Distress Syndrome 1979

Head Trauma in Children 1980

Children's Hospital Grand Rounds:

Cerebral Resuscitation 1979

Head Trauma 1981

Tri City Hospital and North City Health Center:

Head Trauma in Pediatric 1983

City Wide Trauma Conference, Scripps Hospital:

Head Trauma in Pediatrics 1984

Children's Hospital - San Diego

Pediatric Trauma 1981

Pediatric Trauma 1984

University of California, San Diego

Trauma Management 1984

Neurological Intensive Care of Head Injured Children:

Children's Hospital Trauma Grand Rounds 1984

Joanna Maida Leukemia Foundation - Telethon Board, San Diego, CA. April 1986

San Diego Chapter of the American Association of Critical Care Nurses:

Neuro Trauma: A Critical Care Update. Mercy Hospital San Diego, CA. May 1986

Grand Rounds Summer Series: Drowning and other injuries in Children.

Children's Hospital - San Diego, CA. July 1993

Lectures at Rady Children's Hospital – San Diego

Diffuse Brain Swelling: Osmotic Therapy
Hypertonic Saline : physiology and pathophysiology
Hypertonic Saline and Cerebral Pathophysiology
Lund Concept and Brain Swelling
Pulmonary Edema
Acute Respiratory Distress Syndrome
High frequency – low stretch ventilation
Non-conventional ventilation
Systolic Function of Heart
Diastolic Function of Heart
Management of Post Cardiac Bypass – Cardiac Dysfunction
Myocarditis
Shock
Cardiogenic Shock
Distributive Shock
Septic Shock
Meningococemia
Toxic Shock Syndrome
DVT and Pulmonary Embolus in Pediatric Patients
Renal Failure and CRRT
Hemolytic Uremic Syndrome
Management of Hyperammonemia
Management of Cardiac Arrest
Cardiopulmonary Cerebral Resuscitation
BSER for Determination of Prognosis in Cardiac Arrest
CT Head for Determination of Prognosis in Near Drowning Cardiac Arrest
Brain Death
Near Drowning: Pathophysiology
Pediatric Trauma Resuscitation
Pathophysiology of Traumatic Brain Injury
Blunt Chest Trauma
History of Pediatric Critical Care

STATE OF ALABAMA §
 §
COUNTY OF WALKER §

BEFORE ME, the undersigned authority, personally appeared, Thomas C. Mayes, M.D., FAAP, FCCM, who being duly sworn by me, upon his oath deposed as follows:

1. My name is Dr. Thomas C. Mayes. I am over twenty-one years of age, have never been convicted of a felony or a crime involving moral turpitude. I am fully competent to make this affidavit and have personal knowledge of the facts stated herein and they are true and correct.

2. I graduated medical school at Georgetown University in 1984. I was certified by the American Board of Pediatrics (ABP) in Pediatrics in 1987 and Pediatric Critical Care Medicine (PCCM) in 1990 and have continuously maintained certification in both through the ABP's Maintenance of Certification (MOC) program. As a board-certified pediatric intensivist, I have practiced pediatric critical medicine at multiple Texas hospitals and have held faculty positions in several Texas medical schools over the last 30 years. I am a Fellow of the American Academy of Pediatrics and the American College of Critical Care Medicine.

3. For twenty-seven years, I practiced as a pediatric intensive care specialist in San Antonio, Texas and was on the full-time faculty of the University of Texas Medical School in San Antonio (now UT Health San Antonio) from 1994 - 2016. At UT Health San Antonio I served in a variety of roles including founding division chief of pediatric critical care, founding pediatric critical care fellowship training program director, associate dean for clinical affairs, interim dean of the medical school, and chairman of the Department of Pediatrics (2002-2016). During my entire tenure at UT Health San Antonio, I maintained active clinical practice in pediatric critical care medicine. In addition to my academic responsibilities I served as medical director of the Pediatric Intensive Care Units (PICU) at University Hospital and Santa Rosa Children's Hospital

in San Antonio, Texas. From 2006-2012 I served as Physician-in-Chief of CHRISTUS Santa Rosa Children's Hospital in San Antonio. This position is best described as Chief Medical Officer for the Children's Hospital. Among my responsibilities were assuring quality care through appropriate credentialing of physicians and other providers based on training, experience and certification.

4. On sabbatical from UT Health San Antonio from September 2015 through August 2016 I served as a Robert Wood Johnson Foundation Health Policy Fellow in Washington D.C. I was assigned to work as a staff member of the Subcommittee on Health of the Committee on Ways and Means of the U.S. House of Representatives. In November of 2016 I retired from UT Health and relocated to New York for personal reasons.

5. I began work as a locum tenens pediatric intensivist at El Paso Children's Hospital (TX) in January 2017 and for the next 15 months spent approximately 1 week a month in El Paso working in the PICU at the Children's Hospital.

6. In early 2018 I was asked by the Dean of the Paul L. Foster School of Medicine (PLFSOM) of Texas Tech University Health Sciences Center El Paso to serve as interim Chair of the Department of Pediatrics. I agreed and began my service as chair of the academic pediatric department at the PLFSOM on April 1, 2018 and conclude my tenure on December 31, 2019. Shortly after this full-time academic employed appointment, I was appointed to the non-salaried medical staff position of Chair, Department of Pediatrics at El Paso Children's Hospital (EPCH). The EPCH Department of Pediatrics is composed of all providers, irrespective of PLFSOM faculty status, who are pediatricians or pediatric subspecialists. Other medical staff at EPCH were appointed to the Departments of Surgery, Anesthesia, and Diagnostic and Interventional Services depending on their specialty and training. A fifth department of dental services was added in late 2018 or early 2019.

7. While serving in my capacity as medical staff Chair the Department of Pediatrics at EPCH, one of my tasks was to ensure that physicians were appropriately trained, certified, qualified, and could demonstrate appropriate experience in practicing the hospital and professionally accepted standards of care while practicing pediatric medicine at EPCH.

8. EPCH's bylaws required narrow and clear industry-accepted standards of care relating to peer review. This was not unique. Over the last thirty years, medical providers and hospitals have widely adopted rigorous peer review processes, to ensure hospital doctors follow narrow and well-defined hospital and industry-accepted guidelines relating to standards of care and have their work product reviewed routinely by others for quality assurance.

9. Perhaps the most important requirement in the ECPH bylaws required practicing doctors at ECPH to be board certified in their chosen practice field. Put plainly, doctors working as pediatric intensive care specialists were required to be board certified. This policy is not unique to ECPH. It has been accepted as standard medical practice in every hospital I have practiced in over the last 30 years and over the last twenty years has become the national; standard, particularly for hospitals designated as children's hospitals.

10. In late 2018, Dr. Roberto Canales, applied for medical staff privileges at EPCH. I had not previously met Dr. Canales but was aware of his long-standing practice at another facility in El Paso. Around the time of his application for EPCH privileges I had the opportunity to review the medical records of a patient who had been under his care. That review was part of my being retained as an expert witness in a legal action not involving Dr. Canales. In that review, I was startled to see the poor quality of his medical records. I observed the documentation was universally generated by nurse practitioners (NPs) with his co-signature added at much later dates and that the physical examinations recorded in the chart were in no way consistent with

photographs I had of the child on the same dates. My impression in general is that the electronic medical record was essentially “pencil whipped” meaning boxes were checked without a corresponding examination.

11. I knew that Dr. Canales, working as a pediatric intensive care specialist at another hospital in El Paso, was neither trained nor certified by the ABP in PCCM. This was highly irregular as El Paso, in 2018, had at least eleven fellowship trained and ABP certified PCCM specialists working in the community. I viewed the lack of formal training and/or board certification in PCCM to pose a significant risk of injury to EPCH patients. In the past, I have terminated at least 5 medical school faculty physicians who were unable to achieve board certification in their chosen practice field within two testing cycles.

12. Therefore, because Dr. Canales was not fellowship trained, not certified and in my view was unqualified to practice pediatric critical care medicine at EPCH, I declined to sign off on Dr. Canales credentialing in the area of pediatric intensive care medicine. I did sign off on allowing Dr. Canales to practice general pediatric medicine. Dr. Canales was board certified in by the ABP in Pediatrics (general pediatrics) in 1985 and received a “permanent” certificate. In 1988 the ABP stopped issuing permanent certificates and began issuing time-limited certificates which required perioding testing to maintain board certification and ultimately evolved into the MOC program which is the vehicle to assure quality diplomates through a combination of continuing medical education, participation in quality improvement initiatives and periodic (every 10 years) testing. As of today, the American Board of Pediatrics website (www.abp.org) indicates that Dr. Canales was certified in Pediatrics in 1985 with certificate number 31696 which does not expire and that he does not participate in MOC. In my experience reviewing credentialing files, most pediatricians with “permanent” certificates participate in MOC as part of their commitment to

provide quality care to children.

13. Dr. Canales had applied for EPCH medical staff privileges in 3 distinct areas: general pediatrics (hospital care of children not in an intensive care unit), pediatric hematology/oncology for the care of children with cancer, and pediatric intensive care. As Dr. Canales had appropriate training and a permanent certificate in pediatrics from the ABP and all other documents were in order, I signed off on this set of privileges. As he had 3 years of hematology/oncology fellowship training at reputable programs in the early 1990s and had been providing care to children with cancer and blood disorders in El Paso for over 20 years, I accepted the recommendation of the medical director of hematology/oncology and signed off on these privileges and requested a waiver as called for by the EPCH Medical Staff Bylaws. As noted above I declined to approve credentials or request a waiver in credentialing for pediatric intensive care medicine.

14. When EPCH hospital administration discovered my refusal to sign off on Dr. Canales' pediatric intensive care privileges, I was ambushed by hospital administration, who repeatedly requested that I allow an exception for Dr. Canales.

15. This all began when one hospital administrator, Ms. Melissa Padilla—who reported directly to EPCH CEO Cindy Stout—requested a meeting with me, Dr. David Yates who chaired the EPCH Credentials Committee, her and Ms. Stout at 5 pm on a Monday evening. I was presented with some forms to sign related to Dr. Canales. My standard practice is to read all forms before I sign them. Upon doing so, I discovered that one of the forms was a waiver form that would create an exception and allow Dr. Canales to practice pediatric intensive care medicine despite his clear lack of certification, training, and qualifications.

16. I refused to sign the waiver form. I explained to Ms. Padilla why Dr. Canales was

significantly underqualified to practice as a pediatric intensive care specialist and why I could not in good conscience allow Dr. Canales to treat patients as a pediatric intensive care specialist. I agreed only to sign off on Dr. Canales' work in the area of general pediatric care. Ms. Padilla was clearly upset at my refusal to sign the waiver.

17. At about 45 minutes into this meeting Ms. Stout, CEO of EPCH, arrived and the whole discussion was repeated. Ms. Stout attempted to "brow beat" me into signing the waiver. She explained in detail that the hospital needed Dr. Canales to work as an intensive care specialist because of his ability to generate increased inpatient volume and associated revenue for the hospital. She explained that it was "very important for the hospital to get Dr. Canales' business," and "it would be very beneficial to the hospital." She further explained the volume of patients and money Dr. Canales could generate for EPCH if allowed to work as a pediatric intensive care specialist and explained that the hospital was not doing well financially.

18. Again, I refused to sign her waiver and explained why Dr. Canales posed a significant risk to EPCH's patients in the area of pediatric intensive care medicine, my own subspecialty. Ms. Stout left our meeting upset.

19. A few days later, I attended a 7 am meeting with Drs. Chet Moorthy (radiologist and past EPCH chief of staff), David Yates (oral surgeon and chair of the EPCH Credentials Committee), Jarrett Howe (pediatric surgeon), Bill Spurbeck (pediatric surgeon and Chair of EPCH Department of Surgery) and Marc Orlandi (Chair of EPCH Anesthesia Department). This meeting was essentially a recapitulation of the meeting described above. The group's message was that Dr. Canales "was a great guy," and they could all attest to his skill as a pediatric intensivist and that the hospital really needed his business. I listened and explained that he did not meet the qualifications set out in the EPCH Medical Staff Bylaws and that as a very senior Texas fellowship

trained and board-certified pediatric intensivist I was in a better position to judge his suitability for privileges. Dr. Prashant Joshi, the EPCH PICU Medical Director, also needed to sign off on the credentials before being presented to me. He was out of the country and so things were deferred until he returned, could evaluate the request and make a recommendation. Upon his return and review of Dr. Canales's credential packet he too declined to sign off. The badgering went on for another week or so and through at least one but perhaps two credential committee meetings, but ultimately, I let Dr. Yates know that further discussion was counterproductive as I wasn't signing off on the privileges or requesting a board certification waiver.

20. Without my signature requesting to waiver of the requirement for board certification for Dr. Canales to practice in the area of pediatric intensive care medicine, the Credentials Committee voted to recommend approval anyway and transmit it to the Medical Executive Committee for approval and submission to the EPCH Board of Directors for approval and granting of privileges. I voted against both actions as a member of the Credentials Committee and the Medical Executive Committee. The EPCH Board of Directors granted privileges for Dr. Canales to practice as a pediatric intensive care specialist over my rigorous objections.

21. As interim chair of the academic Department of Pediatrics at the PLFSOM I learned that Dr. Canales had previously obtained a non-paid clinical faculty appointment as clinical assistant professor of pediatrics. As such, he could supervise both medical students and resident physicians from the PLFSOM. After the EPCH Board of Directors granted him privileges and upon the request of Ms. Cindy Stout, EPCH CEO, I attended via videoconference a meeting on April 24, 2019 with Ms. Stout, Dr. Canales, Ms. Padilla and the pediatric residency program director, Dr. Jesus Peinado. On April 25, 2019 I wrote a letter to Dr. Canales providing clear conditions on which he could supervise medical students, and I instructed him that he was to refrain

from supervising or training medical students in the area of pediatric intensive care medicine and his supervision and training would be limited to general pediatric care and pediatric hematology/oncology.

22. Dr. Canales began admitting patients to EPCH in March of 2019. Accommodations for Dr. Canales increased throughout 2019. In my last meeting with Ms. Stout in November of 2019 we discussed my concerns as PLFSOM academic chair of seemingly two sets of quality standards and processes in place at EPCH. One set applied to Dr. Canales and the other set applied to everyone else. She denied this to be the case but the conversation evolved to the EPCH Medical Staff Peer Review Committee which I chaired and my desire to transmit to the medical staff the processes being put into place to resurrect the nascent peer review process. These processes are standard medical staff processes by which providers have peer review. Referrals would come from a variety of areas including morbidity and mortality but could be review for unexpected outcomes. In practice, most of these reviews identify system issues rather than specific practitioner issues but if practitioner issues were identified the practitioner would be notified and invited to provide their perspective and input and if warranted appear before the Peer Review Committee. Despite my insistence that EPCH follow industry-standard peer review process, codified in its bylaws, Ms. Stout notified me that she thought Dr. Canales should be present to participate in his own peer review and any other avenue would be unfair. She then decided to put the entire peer review process on hold pending an outside consultant's review and recommendations. In other words, Cindy Stout was telling me that Dr. Canales could grade the quality of his own work without any accountability from his peers. Ms. Stout further explained this was necessary because Dr. Canales probably would not "get a fair shake" from the other physicians at EPCH, specifically those employed by the PLFSOM.

23. EPCH went further and instituted policies to circumvent long standing processes for the transport of patients to EPCH from outside the facility, admission policies such that Dr. Canales could claim “ownership” of patients admitted to other practitioners, providing a separate admissions pathway through the nursing AOD (administrative office of the day) and most disturbing creating two standards of care for children admitted to the PICU. One was the long standing 24/7 in house coverage of the PICU and pediatric transport team by fellowship trained and board-certified pediatric intensivists. The other was the standard of remote care often provided by NPs by a physician neither trained nor certified in PCCM. Ms. Stout it one step further by declaring that the EPCH unit medical directors (PICU, hematology/oncology and general pediatric units) could not review the inpatient charts of Dr. Canales’s patients. When I questioned this as a very unusual way for a medical director to assure quality care, she let me know the medical directors served at the pleasure of the EPCH CEO.

24. This policy changed altered the way the PICU operated. Previously, a defined group of individuals oversaw and handled ICU patients and were board certified and trained to do so. That changed with Dr. Canales. Every other doctor was board certified except Dr. Canales. There were times when urgent patient concerns would arise in the ICU, and physicians were forced to respond to staff calls for assistance by saying, “that is not our patient” and “we can’t help them.” If a patient had a critical deterioration, the on-site intensivist would intervene and care for the child until Dr. Canales arrived. This unfortunately put the nursing and respiratory therapy staff at risk but more so the children admitted to the PICU under his name.

25. This policy—that physicians could only treat their own patients—was a business-first model prevalent in the 1970s and 1980s and has been phased out over the last forty years as specialization has occurred and separate intensive care units have evolved. The standard practice

in Texas Pediatric ICUs, particularly in children's hospitals, is for intensive care units, both pediatric and neonatal, to be covered by one group of appropriately trained and certified intensive care specialists. When Dr. Canales privileging in pediatric intensive care, EPCH disregarding its industry-accepted practices and adopted this archaic approach—where only Dr. Canales could treat his own patients—to accommodate Dr. Canales.

26. It was quite clear to me that EPCH was doing everything in its power to appease Dr. Canales in order to continue to obtain his business. This included appointing Dr. Canales as chief clinical officer in December 2019, a position that included no apparent additional responsibility but likely remuneration for the position. A mandatory medical director meeting was held to announce the appointment but for some reason Dr. Canales didn't show up.

27. In late 2018, I began to periodically meet with Cindy Stout, CEO of EPCH, to review issues and opportunities for the EPCH and the PLFSOM Department of Pediatrics. In November 2018, while the process was ongoing but before Dr. Canales was credentialed, I raised my concerns about the unintended consequences of adding a solo practitioner to a well-run clinical operation in the PICU.

28. By way of example, but not limited to these examples, in the summer of 2019 I met with Cindy Stout and raised concerns that no physician had seen at least one patient in the PICU the weekend in July when I had been on call as a member of the core team. When I contacted the intensivist covering for Dr. Canales he admitted he, the covering physician was in San Antonio. Ms. Stout followed up with me and explained it was nursing staffs fault as the child was to have been transferred. This didn't reflect my 3-year experience with the PICU nursing staff.

29. On March 12, 2019 I met with Cindy Stout and raised concerns that “there is a sole provider who is not subject to peer review.” “There is a sole provider who is able to give telephone

orders,” which is not allowed. “There is a sole provider who is not subject to peer review.” “There are significant concerns by myself and other doctors that the sole provider is not signing his medical charts.” It was clear that I was referring to Dr. Canales.

30. Cindy Stout, her administration team, and the ECPH board promoted these accommodations on behalf of Dr. Canales for the sole purpose of appeasing Dr. Canales’ demands so Dr. Canales would continue to generate significant patient volume and revenue to ECPH. This was born out in the hospital’s revenue. Prior to Dr. Canales’ arrival, ECPH’s annually lost money. That changed once Dr. Canales began practicing at ECPH. Once Dr. Canales began generating revenue, ECPH took over and direct steps to accommodate Dr. Canales. Cindy Stout stated this was an important reason for accommodating Dr. Canales.

31. It is my opinion that ECPH violated their own bylaws and industry-accepted standards of care repeatedly when it allowed, accommodated and promoted an untrained, uncertified physician to provide direct pediatric intensive care to patients altogether, more egregiously without any oversight, peer review, or quality control. ECPH’s other overt actions—including allowing Dr. Canales to phone in orders, avoid signing medical charts, failing to follow hospital procedures, ignoring repeated concerns raised by doctors about Dr. Canales’ practice, and threatening doctors that challenged Dr. Canales work product—threatened the lives of patients admitted to ECPH.

32. Summarily, Dr. Canales violated accepted standards of care by routinely practicing pediatric intensive care medicine even though he was untrained, uncertified, and unqualified to do so. Even when doing so, Dr. Canales ignored clear hospital policy and procedure in practicing pediatric intensive care medicine and did so routinely. This repeatedly placed patients in grave danger and promoted a serious and continuous breach in the standards of care widely adopted by

the pediatric medical community.

33. I have also been provided with all of the hospital records for the deceased minor child of David Saucedo. In reviewing those records, which total over 1,000 pages, it is my opinion that Dr. Canales repeatedly violated pediatric standards of care, misdiagnosed the patient, and committed gross medical malpractice in treating the child, all of which directly led to the child's death. This is not at all surprising and is consistent with the extent and scope of care I witnessed Dr. Canales provide to patients at ECPH.

34. It is my opinion—as a medical doctor, a senior Texas fellowship trained and certified pediatric intensivist, academic pediatric department chair of two public Texas medical schools, medical director of 3 separate pediatric intensive care units, and medical staff leader at numerous medical institutions, including Physician-in-Chief for 6 years at a Texas children's hospital, across over 30 years of practice—that Dr. Canales presents a real danger to his patients and should be removed from the practice of medicine.

FURTHER AFFIANT SAYETH NAUGHT



Thomas C. Mayes, M.D., FAAP, FCCM

SWORN TO AND SUBSCRIBED BEFORE ME, the undersigned authority, on the 21st day of April, 2020.



Notary in and for the State of Alabama

My Commission expires: 12-11-2022