

A review of the life of John Plunkett (1947–2018)

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ABSTRACT

The unusual forensic pathologist John Plunkett began life in a family steeped in legal tradition, his father becoming a judge at age 29, bringing his 8-year old John to court to observe. A man of the people, Dr. Plunkett had a mind intolerant of deviations from objective truth, which he used to establish factual innocence. Initially diagnosing 2 cases as Shaken Baby Syndrome (SBS) himself, his critical mind and ability to learn made him an early apostate from SBS beliefs. He worked on 948 medico-legal cases throughout his career. While helping others, he himself was sued by a prosecutor to silence him, but Dr. Plunkett was unbowed, and found not guilty by a judge. Not a natural academic, he nevertheless published highly cited articles on basic, oft-forgotten truths such as the lethality of short falls and the existence of lucid intervals. His articles have stood the test of time. He knew science is not a democracy, and counselled other physicians attacked in courts due to holding minority views. Plunkett influenced the lives of many accused and their children, eventually becoming expert in the thinking that could lead to false allegations of child abuse. This eventually defined him, as featured in a documentary movie, *The Syndrome*.

“The problem isn’t with what we don’t know. The problem is with what we do know that isn’t so.”

Will Rogers

“If the law has made you a witness, remain a man of science. You have no victim to avenge, no guilty or innocent person to ruin or save. You must bear witness within the limits of science.”

Paul H. Broussard, Chair of Forensic Medicine, Sorbonne, 1897

John Jerome Plunkett II was born in Saint Paul, Minnesota, April 15, 1947 to Margaret Mary Marzolf and John (“Jerry”) Jerome Plunkett, a law student who was later appointed as a Minnesota judge at just 29 years of age. John was the son and grandson of lawyers. Several uncles and great-uncles in the Plunkett family were also lawyers, and two brothers and several cousins subsequently became attorneys.

John’s mother died of multiple sclerosis when he was five, leaving three children, John being the eldest. His father remarried a couple of years later to Patricia Bonner, and they had five more children, so there were altogether 10 in the family. While a judge’s salary allowed the large family to live comfortably, they were never well off.

Being born into a family steeped in legal tradition and the judiciary shaped the young John. The judges would hold a weekly court, and John accompanied his father (Fig. 1) every fifth Saturday. So from age 8, he saw how the court system worked. Although principles of natural justice are innate and universally agreed upon, John gained his own intuitive awareness of justice, from an early and formative age.

John’s primary school education was in parochial schools in Saint Paul: Saint Theresa’s and Immaculate Heart of Mary. An excerpt from a letter received from one of his teachers after John died reveals that those

who knew him agree that John’s early behavior portended the man he was to become:

“I taught John fourth and fifth grade at St. Theresa’s. I grew up with his mother who, by the time I met John, had died, and Jerry had married Pat. John was an excellent student, a great talker, and a better entertainer, and assumed he had no reason to obey anyone except John. After a few days, John learned I was in charge, and I made up the rules! Moving his desk to the coat room was the convincer! From then on, we were the best of friends and John became the defender of all who breathed. I thought he would be a great lawyer! He was one of the best things that happened to me.”

From an early age, John’s interest in common people, and his versatility both became apparent. At age 16, he strove to be one of the regular guys in class by petitioning the headmaster to get out of the accelerated class (the headmaster denied his request). John had a good singing voice and some guitar skills, and in a trio with 2 others, entered a high school talent show, doing a good imitation of the popular folk music group Peter, Paul & Mary.

John was a good student, scoring #1 in grade 7 on a standardized national aptitude test at Immaculate Heart of Mary, and went on to St. Thomas Academy in Saint Paul, Minnesota. John’s favorite subjects were chemistry and history but ironically, not math or physics. He graduated in 1965 from St. Thomas Academy and in 1969 from the University of Minnesota with majors in chemistry and history.

In 1968, he met Donna McFarren from Dalton, Ohio, who saw in him a sterling character and exceptional mind, in a person fun to be with, also sharing a steadfast adherence to objective truth. In 1970, they

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Fig. 1. John was exposed to the legal system from an early age. Here he is seen at age 8 with his father, who was a judge. Every fifth Saturday, one of the judges would hold a weekend court and John would accompany his father.

married. John attended the University of Minnesota Medical School and received his medical degree in 1972. After internship and residency at St. Paul-Ramsey Hospital¹ and Hennepin County General Hospital,² he began his professional career at age 30 as pathologist and laboratory director at Regina Memorial Hospital, then a small regional hospital in Hastings, Minnesota.³ From 1978 he held that position for 26 years. Under his leadership the laboratory received awards for quality and enjoyed unprecedented employee retention.

Dr. Plunkett worked with both prosecution and defense attorneys. Iconoclastically, he never became an integral part of the prosecution's team, instead retaining his proper distance, impartiality and objectivity. During his 39-year career as a forensic pathologist, John became the Dakota County coroner shortly after starting at Regina, where he served on the Board of Directors. His office eventually served seven Minnesota counties.

¹ now "Regions Hospital".

² now "Hennepin County Medical Center".

³ now "Allina/Regina Hospital".

1. Short falls

In 1986, a local case in Minnesota introduced John to contentious cases of alleged child abuse when Janet Ostlund, a young mother who had adopted a daughter, saw her 15-month-old standing on a sofa and fall onto a wooden floor. The child later died. Autopsy showed retinal hemorrhage, dural hemorrhage and brain edema, the three findings termed "the triad". Despite the witnessed fall and nothing to hold on to while falling off the sofa, the presence of the triad caused child abuse to be diagnosed via a newly held dogma within the medical community: "shaken baby syndrome" (SBS). The team of doctors testifying for the prosecution was matched by a team of 6 doctors, including Dr. Plunkett, testifying for the defense. Mother went to prison for nearly a decade, was sued for divorce while in prison and lost her parental rights to raise her son, who was one year older than her daughter who had died.

This was not John's first case. As coroner, he had had two cases that he had diagnosed as shaken baby. But it was his third case, the Ostlund case, that gave John pause. His innately curious mind was catalysed by his first courtroom experience on the matter to investigate the medical hypothesis that infers head shaking by a parent or caregiver as an abusive, homicidal cause of pediatric death. Thinking about the verity of SBS in his third case, Dr. Plunkett found it unavailing to have two large teams of experts creating the usual "battle of the experts". He thus set out on his own, to learn.

Having majored in chemistry and history, Dr. Plunkett decided that he needed to know more math and physics to take on cases alleging physical abusive head trauma in children. After encountering this new entity of SBS in court, a contradiction dawned on him: that while low-level falls involving contact with an unyielding surface were believed to be devoid of lethal potential, shaking a brain within a skull with no broken neck below it, was believed to be fatal, despite no skull contact with any surface.

John's mind was kindled by the conundrum of lethal shaking but innocuous falling. What followed were years learning physics, especially the physics of impact, much of it with Werner Goldsmith, an authority on impacts. Goldsmith was professor emeritus at the University of California, Berkeley, and had been asked by the National Institute of Neurological Diseases and Stroke, one of the National Institutes of Health, to chair the Head Injury Model Construction Committee. Noting Dr. Goldsmith's 1966-70 study period of head impact, John made a cold call to Goldsmith. They quickly discovered that Goldsmith lived very close to John's son Matt. So it came to pass that every of John's visits to his own son was accompanied by a visit to Dr. Goldsmith. John and Werner became friends, and visits between the Goldsmiths and Plunketts were usually social as much as they were physics tutorials. Together with hundreds of E-mails, all this gave birth to a manuscript, completed days before Werner's death from leukemia. The publication [1] is now cited 161 times. John had arrived at a point where he could explain Newtonian physics on the back of an envelope to other pathologists.

Dr. Plunkett realized helmets were placed on the heads of children because low-level falls were in fact potentially injurious. To see how often fatal injury actually had occurred, John did seminal work using the U.S. Consumer Product Commission database involving playground equipment. He described 18 fall-related fatalities occurring over 11 years. Studying all the medical records, police reports and autopsy reports, he found that $\frac{2}{3}$ were witnessed, and one was videotaped (he was later to be accused of doctoring the videotape). The lowest fatal fall distances were $2\frac{1}{2}$ to 3 feet (76–108 cm). In effect, this proved that a fatal head injury could result from a low-level fall, and John published his findings [2], now cited 256 times.

2. Shaken baby syndrome

Just as the injury potency of a low-level fall was being demoted, the ascendancy of shaking was occurring, due to shaking being given un-critical acceptance as a newly discovered brain-injury mechanism.

Parents or caregivers who attempted to explain a fatal traumatic head injury as a fall were no longer believed to be credible, and doctors began to accuse them of homicide.

Shaking is alleged to be a fatal head injury transmitted up from a shaken thorax via a fragile neck: John saw none of the expected fractures nor dislocations. He also refused to use the ocular and dural bleeding as a springboard to infer homicide. Alone, and already in the 1980's, he presciently knew something was amiss with the shaking hypothesis, although he openly stated that he had believed it himself in his first two cases in the early 1980's. His actions after the 1986 Ostlund case revealed a mind of scientific bent, rendering a life course that was at once both choice and pre-determined.

2.1. The British nanny case

One landmark case that John watched was "the British Nanny Case" of October 1997. On the defence side were physicist Larry Thibault, neurosurgeon-scientist Ayub Ommaya (both of whom were cold-called by Plunkett, just as he had cold-called Goldsmith), pediatric neurosurgeon Ronald Uscinski, neuroradiologist Alisa Gean and neuropathologist Jan Leestma [3]. On the prosecution side were 8 physicians involved in the care of the deceased child. The 8 prosecutorial witnesses included neuroradiologist Patrick Barnes and pediatrician Eli Newberger (Barnes has since altered his stance on Shaken Baby Syndrome). Accused of murder was Louise Woodward, a British nanny working in Massachusetts, who stated her charge, a 9½-month old boy, "was gasping for breath" [4] before he died. It was a landmark trial, intensely watched. Judge Hiller B. Zobel received a guilty verdict from the jury, which meant life in prison. Yet sensing something was wrong (the jury was later revealed to have been split, with no juror believing the nanny had tried to kill), Zobel reduced the conviction to involuntary manslaughter and sentenced Louise Woodward only to time served. This avoided grievous injustice and effectively released her, despite having just been convicted by a jury: it was tantamount to reversing the guilty verdict. Prosecutorial appeals at the Massachusetts Supreme Judicial Court failed in reversing the 279 day "time served" sentence. In the aftermath, the move to reinstate the death penalty stalled in Massachusetts.

These tectonic shifts engrossed John enough to analyse and write about the case. Plunkett saw Ayub Ommaya's work on the British Nanny case, including Ommaya's frank statement on camera that "the question of a Shaken Baby Syndrome is really in the realm of mythology" [5]. Plunkett admired Ommaya's general work [6] (the Ommaya reservoir, routinely used in neurosurgery, is named after him). Writing about the Louise Woodward trial [7], John cataloged the weaknesses in the theory of brain damage by shaking, covering amount of force, retinal hemorrhage, subdural hemorrhage, lucid intervals, and diffuse axonal injury. Plunkett also quoted Sunderland, who stated "Increasing experience may merely allow the same mistake to be made with increasing confidence" [8]. Reading this, pathologist Cyril Wecht thought Plunkett's reasoning was cogent; "an important and significant contribution to the medicolegal and forensic pathology literature regarding the so-called 'shaken baby syndrome' (SBS)" [9] while others demurred [10]. John had always seen shaking as a fast route to prison, but in 1997 noted a second fast-track to prison: a newfound denial of the routine existence of lucid intervals in pediatric head injury [11].

3. Lucid intervals in childhood

John saw risk of injustice in failure to recognize the common occurrence of lucid intervals [12], those periods of consciousness after a head injury, but before eventual death. Known since time immemorial to be the rule in pediatric head injury, in 1997, lucid intervals suddenly were demoted, just as low-level falls had been, in the child abuse literature [11]. John rose to the challenge of correcting the misinformation about the absence of lucid intervals in children under age two, that would make parents liars in front of the courts if they told the truth

describing lucid intervals after falls in their children. John presciently saw the opening of a Pandora's box with this, delineating 4 distinct things that were wrong in a supererogation [12].

John first pointed out that the authors' own study [11] did not support their conclusion. John recited their own baleful words "If a history purports a lucid interval... that history is likely false and the injury is likely inflicted." perspicaciously adding that these words had "the significant potential to terribly mislead other physicians, child protection workers, the public, and the courts" [12].

John's second point was whether motor vehicle accidents, slamming and falls should look different [12] and like his first point, was left unanswered by the authors [13].

Third, Dr. Plunkett picked up on the authors' error that an ability to feed means a normal brain. John wrote "the authors state 'for a baby, normal behavior may be demonstrated by the ability to feed.' The sucking reflex is a brainstem reflex, is present in children who are anencephalic, and is not abolished until brainstem function has been compromised (i.e., the child is not breathing)." On this, the authors replied, that "taking a feeding is a complex, coordinated activity which requires more of the brain to be working" than the brainstem, but John's assertion that anencephalic babies can feed, which is well documented [14], was left unanswered.

John called out a fourth point, contained in the article's very title [12], that any doctor could now restrict the time of injury by discounting lucid intervals and thereby know parents or caregivers were guilty [11]. John predicted [12], this abandonment of the lucid interval would open the door to destroy innocent lives and families into the new millennium. He was here also left unanswered [13] but in courtrooms over the years, was proven right. Timing, which determined so much guilt-or-innocence, was now linked to this signal point of the presence or absence of an alleged lucid interval. Absenting a lucid interval [11], a new rule emerged *de novo*: the last person with the child must have killed the child. This new logic spread, converting cases into "whodunit" from "what happened".

Years later, in 2014, John reiterated in the documentary film *The Syndrome* [15], the folly of the widespread and erroneous medical conclusion "that the parents or caregivers must be lying" if they describe a lucid interval in the presenting history. Forensic consideration of "Who did it?" over "What happened?" persists to this day in cases of child abuse. Beliefs about lucid intervals contribute. John Plunkett called out the belief that lucid intervals don't often exist, immediately and clearly.

4. Equanimity and epistemology

Salvos were part of John's life. These ranged from supercilious remarks to literature diatribes against his articles and letters, to an actual criminal case against Dr. Plunkett. John took scurrilous public criticism with equanimity. One SBS-believer neurosurgeon, while introducing John as a speaker, at the Conference on Pediatric Abusive Head Trauma at the Snow King Resort in Jackson Hole, Wyoming, acknowledged the animosity of the largely SBS-supportive audience in his introduction, professing that he would not say "John, you ignorant slut" [16]. Without further ado, John rose above the *ad hominem* slur and delivered an impressive scientific presentation that included the fatal fall from a toddler gym he had described [12].

In one trial in Kansas, Drs. Plunkett and Leestma both testified for the defense. In his closing arguments, the prosecutor called them the "two dingbats". The defendant was acquitted. When a new edition of Jan Leestma's Forensic Neuropathology book came out [17], several people brought their copies to a conference for Leestma to sign. In John's copy, Jan Leestma wrote "From one dingbat to another".

John was not a natural academic who published many articles. His papers are dense, and the same message in two different articles "publication splitting" is absent from his papers. But he published more than most apostates from SBS, even publishing in the journal *Child Abuse Pediatrics* [12] in standing up for keeping families together.

Dr. Plunkett's epistemology was immaculate, and can be summarized by the two quotes introducing this review, which he placed at the beginning of one of his papers [7]. John had an innate zero-tolerance policy for falsehoods and fabrications. Not a belligerent man by nature, he initially (in his own words) "had no idea of what I was up against" by questioning the fundamental logic of knowing child abuse by some members of the pediatrics community. John had felt pushback as he meticulously exposed that the burgeoning medical literature on how to infer child abuse was riddled with misinformation. But the often under-the-radar, truculent, toxic war against experts was only fully exposed for all to see when John himself was sued for his expert testimony.

5. Lawsuit against Dr. Plunkett

One ambush stands out in John's life when he was temerarily charged with "false swearing under oath" by the District Attorney in Oregon. The precise trigger of the lawsuit was that on May 31, 2001 in Deschutes County, Oregon, he had truthfully said "to the best of my knowledge, I have never testified in the same trial as Dr. Mary Case." He had in fact testified in a trial along with Dr. Case but was unaware of it, due to testimony having been via videolink, in the trial of State v. Stickney. He was also to be tried for stating he had been asked to re-write a chapter in a forensic pathology textbook. The textbook's author maintained he had merely asked John to review the chapter. For these innocuous misstatements, Dr. Plunkett was charged with a misdemeanor in Oregon, and faced up to one year in jail.

Dr. Plunkett was offered a plea deal, just as many of the very people John was defending had been offered. The plea deal involved John avoiding jail time in exchange for a nominal fine of \$5000 and agreeing never to testify in the State of Oregon again. Saying something to the effect of "no", John remained unbowed and declined the plea deal offer [18]. Although a plea bargain would have ended the madcap lawsuit, it would have left Dr. Plunkett guilty-for-life, just like the people John was defending. If John pled guilty, this would have trapped him in his medico-legal work, within a microcosm of traps set for parents and caregivers who routinely accept plea bargains.

Bennett Gershman, a former prosecutor and expert on prosecutorial misconduct, analyzes the abusive charging of Dr. Plunkett, describing it as "over the top" [19]. Gershman's conclusion, that the capacity to charge someone with a crime is a dangerous power if misused, is something John well knew by that time, now with his very own experience. Dr. Plunkett knew that not only prosecutors, but now doctors, had been bestowed the power of charging a person with a crime, by inferring abuse. These newfound, extended powers of doctors, perforce, made them prosecutorial assistants, no longer neutral physicians.

During the time John was being sued over his testimony, many people offered to come at their own expense to support him. But nearly 4 years after John had testified in the Stickney case, the Oregon District Attorney lost. Case MI030457 in the Circuit Court for the State of Oregon was closed by a final opinion written February 16, 2005 by Judge Barbara A. Haslinger exonerating Dr. Plunkett of any wrongdoing.

Having narrowly escaped imprisonment himself, despite his natural equanimity, John was finally incensed. He regarded this personal legal incident as public mischief by a prosecutor.

The lawsuit against John only strengthened his resolve. With respected British neuropathologist Dr. Jennian Geddes, he wrote on the absence of evidence for the existence of shaken baby syndrome in 2004, in an article in the British Medical Journal now cited 127 times [20]. The acrimony surrounding SBS led Dr. Geddes to retire, but John was not one to be intimidated. The aphorism "do not mistake my kindness for weakness" was apt for John Plunkett.

6. General forensic pathology

Despite entering the contentious arena of child abuse, Dr. Plunkett

never lost his long roots in general forensic pathology. Early in his career, he published a 1984 letter [21] in the *New England Journal of Medicine*, regarding a previous article on coronary deaths in Minnesota [22], a topic of great interest to John. In 1999 he published on infant death caused by rupture of a basilar artery aneurysm [23]. His deep expertise however, lay in the origin of false charges of child abuse, publishing on resuscitation injuries misdiagnosed as child abuse in two legal cases [24].

7. Abusive Head Trauma

John Plunkett entered the SBS fray after SRA (Satanic Ritual Abuse) had been debunked by the Behavioral Science Unit of the Federal Bureau of Investigation, spearheaded by child victimization specialist Kenneth V. Lanning [25]. SRA was promulgated by the same 3 physicians who abandoned it to devise Shaken Baby Syndrome [26]. But by 2009, SBS was known to be incompatible with physics, so a name change was required to salvage the ability of doctors to certify murder. Abusive Head Trauma (AHT) was born, a new term prescribed to be a more inclusive and secure substitute for SBS by broadening the definition for physicians inferring child abuse [27].

Dr. Plunkett noted [28] that this name change gives unknowable certitude of a new, perfunctory medical diagnosis, AHT. As son-of-SBS, AHT was a direct legal accusation by containing "abusive": doctors could now satisfy a court requiring a *mens rea* (state of mind) for a crime. But AHT was devoid of defined physical content that could yield a testable hypothesis, unlike its forerunner, SBS, which could be tested by biomechanical shaking models. Having learnt much physics, John saw the name change as a fillip for a crumbling diagnosis when the physics of thoracic shaking didn't work as *bona fide* brain trauma. And so, in the second decade of the new millennium, John continued his exposé, which by now had defined him.

8. Influence on others

Dr. Plunkett influenced all types of physicians who felt isolated when they found aspects of child abuse theories discordant with reality. Discovering that John had preceded them in their scepticism, these physicians were now no longer alone in their ineffable disgust at proceedings they encountered, which included removing children from families and imprisoning parents. While physicians whom John had influenced would not yet find themselves in the mainstream, as invariably brought forth in court, they at least found themselves counseled by Dr. Plunkett. He told many doctors that "science is not a democracy".

One pathologist-lawyer who recalled first seeing John at a conference in the late 2000s, Dr. Matthew Orde found "he put the fear of God into me – his analysis of the data was so powerful and compelling that I immediately realized that he was of course speaking perfect sense, and that I and my colleagues had been getting it wrong for so many years! His contribution to forensic medical practice has been inspirational, and his critical analysis of the science has undoubtedly helped achieve just outcomes for numerous innocent persons accused of the most heinous of crimes on the basis of flawed medical evidence." One physicist wrote "John was a hero to many – academics and unjustly accused alike." One pediatric neurologist, Dr. Joseph Scheller, wrote "Sometimes you meet a person only a few times, yet that person has the power of personality to make a lifelong impression. I met John only a few times, but his spirit influences all that I do in my work on behalf of families or babysitters accused of abusive head trauma. John stood for integrity, intellectual honesty, and most important, not backing down even when it appears that you are outnumbered. Without John, I wouldn't be spending the majority of my work week analyzing medical records and radiology images in 'fine tooth comb' detail, consulting and critiquing the medical literature, attempting to explain complicated pathophysiology to lay people, and silently taking verbal punches from doctors, lawyers, and sometimes even judges. If this is sometimes effective, I have John to

thank for that.”

Another personality trait of John was his love of humor. I first met John Plunkett at the World Conference on Infant Head Trauma in Plano Texas, November 2013. On learning of John’s sense of humor, I referred to those with fervent belief in the orthodoxy of Shaken Baby as “SBSers”. John loved it. Another favorite tidbit of humor of John’s was from physicist-lawyer Dr. Thomas L. Bohan, who remarked tongue-in-cheek on the potential use of the Higgs boson in the diagnosis of child abuse (the Higgs boson was a recently discovered elementary particle completing the Standard Model in particle physics). Bohan, then President of the American Academy of Forensic Sciences (AAFS), singled out Shaken Baby Theory even higher than bite-mark analysis, tool-mark analysis, handwriting comparison, and friction-ridge fingerprint analysis for the top of the list of all questionable forensic practices [29]. John’s work enabled this insight. While both Bohan and Plunkett were serious in their determined work to undermine falsehoods leading to injustice, if one could expose canards with hilarity, so much the better.

An even larger love of John than humor was children (Fig. 2A). He even dressed up with them occasionally to go out on Halloween (Fig. 2B). John was good for children one-on-one, and remotely via assisting families at risk of being broken by family and criminal courts.

John loved and looked after animals as well as children. He and Donna purchased farmland around 1990 and built a barn around 1996 for their 4 horses. By that time, they were doing a lot of trail riding, both locally and in places like the Ouachita Mountains of eastern Oklahoma and the Black Hills of South Dakota. John and Donna moved to the farm full-time in 2003. They went trail riding alone and with others, often taking friends and family on group rides. Dozens of children had their first horseback ride at John’s farm. Donna and John rode every weekend, weather permitting, and often went horse camping with friends. John and Donna believed that owning horses (or dogs, or cats ...) is lifelong commitment, so over time, it naturally became a geriatric horse herd, all horses living out their retirements on the farm. John was not a particularly gifted horseman, but always kept the equipment needed for riding in good repair. He loved the farm and the rural lifestyle.

Visitors were taken trail riding by John and Donna, who kitted them out in cowboy hat and boots. When one pathologist, after visiting John on his farm and receiving his hospitality, went on to receive the Champion of Justice award wearing a smart suit and combed hair, John followed, receiving his Lifetime Award from the Innocence Network, devoting part of his “acceptance speech” to a presentation of images of this pathologist and other visitors to his farm, battling the rain, helping him dig in fence poles wearing his waterproofs, wearing his cowboy kit while riding. John kept people’s feet on the ground. He was fearless, honest, cared deeply about justice and about all of the wronged families (Fig. 3A). He always had time to listen and to teach, and he was a master at teaching.

9. Legacy

In January 2016, John was diagnosed with prostate cancer. Having worked on 948 cases, he stopped doing them only in 2017. John was there “right to the end”, as had been Ayub Ommaya [30].

John considered one of his greatest contributions to be the collaboration of scientists and doctors from different specialties- physicists, biomechanical engineers, and physicians to address issues and errors surrounding the SBS hypothesis, both on a list server and in person. By the time John passed away, this collaboration had grown to 123 members, resulting in both active debate and academic articles, including a biomechanical reconstruction of the fatal toddler fall described in his 2001 paper [2]. True to form, he kept members of the list server apprised of his medical status, obviating curiosity, gossip and surprises, all due to John’s forthright style of personality.

John passed away April 4, 2018 at his farm in Welch, Minnesota, surrounded by loving family and friends. He was extraordinary, a strong and loving human being at the same time. A gift to the world, he did his

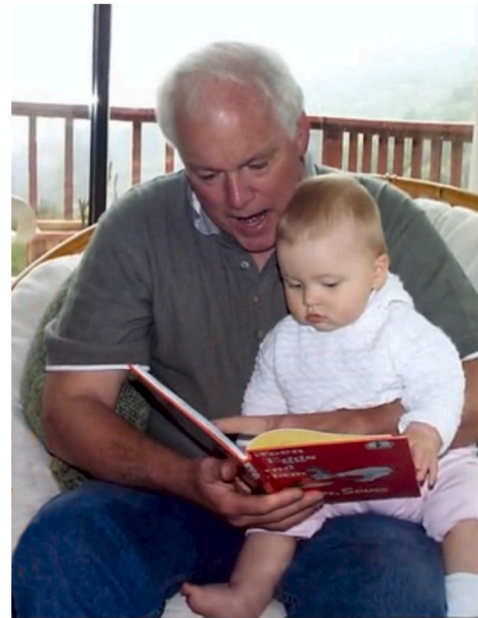


Fig. 2. John loved children and is seen here with his granddaughters. He is reading to Fiona (A) and is dressed up to go out on Halloween with Cailin and Fiona in Berkeley, California (B).



Fig. 3. John is seen here making an address after the Q&A session that followed screening of *The Syndrome* at the Fargo Film Festival (A). From Left to right, John Plunkett, Kathy Jo Hyatt (a policeman's wife whom he helped by testifying at her Frye hearing and her trial, obviating prison), the session moderator, Meryl Goldsmith and Susan Goldsmith. (B) John is flanked by documentary filmmakers Meryl Goldsmith and Susan Goldsmith (no relation to Werner Goldsmith), who featured Dr. Plunkett in *The Syndrome*. (C) John, with his wife Donna Plunkett.

post-conviction work without charge: Dr. Plunkett helped effect dozens of reversals of wrongful convictions where an innocent parent or caregiver had received an often-lengthy prison sentence based on faulty scientific evidence.

These reversals appear in the 2014 documentary film, *The Syndrome*, which describes the backstory of how wrongful convictions of child

abuse have come about. It features Dr. Plunkett. This award-winning film by Meryl Goldsmith and Susan Goldsmith (Fig. 3B) includes cases of children returned to their parents, including the re-united Bayne, Hyatt, Couffer and Stickney families.

For influencing so many, Dr. Plunkett received a Lifetime Achievement Award in 2016 from the Innocence Network – a coalition of organizations, most of which are local Innocence Projects. This award marked him as a humanist, a versatile man, yet a man of common folk.

John lived long enough to see his views vindicated in several ways. In 2012, Dr. Arthur Norman Guthkelch, the neurosurgeon who first proposed shaken baby syndrome [31] and whose work was built on by John Caffey [32] acknowledged that the findings that had been attributed to shaking or abuse are also seen in birth injuries, minor accidents and natural disease processes. He also stressed that shaken baby syndrome/abusive head trauma are "simply hypotheses, not proven medical or scientific facts". [33,34]. Two years later, the Swedish government commissioned a two-year scientific study on the evidence base for shaken baby syndrome, staffed largely by physicians and scientists from the Karolinska Institute, one of the world's most prestigious medical institutions. This study concluded that the evidence base for shaken baby syndrome is "insufficient", "unreliable" and based on "circular reasoning and not scientific criteria" [35]. It went on to say that, given these findings, it would be "incompatible" with doctors' professional duties to opine that a child had been shaken [35]. Notably, these are the same conclusions John reached nearly two decades earlier. Ignoring this allows ongoing medical errors and misdiagnoses that can do great harm to people [35]. As outlined in this journal, further conscientious work is required to eliminate both systemic administrative type problems [36] and individual bias [37].

Dr. Plunkett lived true to his medical oath to help people and to "first, do no harm", or *primum non nocere*. He did no harm, but he also worked for children from afar by keeping them with their families. When a child dies, remaining siblings are often removed on the principle that "if you shake one, you shake them all". John's contribution to preserving families, together with his publications, may outweigh his many routine forensic autopsies, in judging the impact of his life.

John was preceded in death by his father Jerry Plunkett, mother Margaret Marzolf Plunkett, stepmother Patricia Bonner Plunkett, and nephew Brian Plunkett. Survived by his wife of over 47 years Donna McFarren Plunkett (Fig. 3C), John also left sons Matt (Jen), and Ben; two grandchildren Fiona and Cailin; siblings Patrick (Anita), Marnie Olson (John), Tim (Lucy), Paul (Susan), Michael (Dawn), Ann, and Peggy; brothers-in-law Neil (Diane), and Russ (Tish); and many nieces and nephews.

Those who stand in court defending parents and caregivers wrongly accused of murder, must know the life of trailblazing John Plunkett, a pioneer who smelled the BS in SBS in the 1980's. His nose for the truth paved the way for others to follow. First to openly declare his apostasy from "believing" in SBS/AHT, his honesty allowed others to freely admit that they had been wrong, including myself in a 1988 case. John Plunkett was a family man, a forensic pathologist, an animal lover, a craftsman and cabinet maker, but a giant in truth seeking. Many can now see farther, standing on his shoulders – farther to truth and justice. Despite being a pathologist, his life ended up benefitting the fine legal tradition in which he was steeped, early in his life.

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Declaration of competing interest

The author declares no conflict of interest.

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Appendix A. Supplementary data

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References

- [1] W. Goldsmith, J. Plunkett, A biomechanical analysis of the causes of traumatic brain injury in infants and children, *Am. J. Forensic Med. Pathol* 25 (2) (2004) 89–100.
- [2] J. Plunkett, Fatal pediatric head injuries caused by short-distance falls, *Am. J. Forensic Med. Pathol* 22 (1) (2001) 1–12.
- [3] S. Teas, E.N. Willey, L.J. Dragovic, In Memoriam. Jan Edward Leestma, MD, 1938–2020, *Am. J. Forensic Med. Pathol.* 42 (3) (2020), <https://doi.org/10.1097/PAF.0000000000000687>, 205–205.
- [4] Susan Goldsmith, Meryl Goldsmith, 25:30, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [5] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 28:00, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [6] A.K. Ommaya, W. Goldsmith, L. Thibault, Biomechanics and neuropathology of adult and paediatric head injury, *Br. J. Neurosurg.* 16 (3) (2002) 220–242.
- [7] J. Plunkett, Shaken baby syndrome and the death of Matthew Eappen: a forensic pathologist's response, *Am. J. Forensic Med. Pathol* 20 (1) (1999) 17–21.
- [8] R. Sunderland, Commentary to Wilkins B, head injury - abuse or accident? *Arch. Dis. Child.* 76 (5) (1997) 396–397.
- [9] C.H. Wecht, Shaken baby syndrome, *Am. J. Forensic Med. Pathol* 20 (3) (1999) 301–302.
- [10] S.D. Coyle, A. Foster, S.L. Cottingham, Shaken baby syndrome, *Am. J. Forensic Med. Pathol* 21 (2) (2000) 198–200.
- [11] K.Y. Willman, D.E. Bank, M. Senac, D.L. Chadwick, Restricting the time of injury in fatal inflicted head injuries, *Child Abuse Negl.* 21 (10) (1997) 929–940.
- [12] J. Plunkett, Lucid interval in infantile fatal head trauma, *Child Abuse Negl.* 22 (10) (1998) 943–946.
- [13] K.Y. Willman, D.E. Bank, M. Senac, D.L. Chadwick, Letter to the editor, *Child Abuse Negl.* 21 (10) (1997) 929–940.
- [14] G. McAbee, J. Sherman, J.A. Canas, H. Boxer, Prolonged survival of two anencephalic infants, *Am. J. Perinatol.* 10 (2) (1993) 175–177.
- [15] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 79:00, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [16] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 79:21, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [17] J.E. Leestma, *Forensic Neuropathology*. Forensic Neuropathology, third ed., CRC Press, 2014.
- [18] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 57:13, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [19] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 58:31, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [20] J.F. Geddes, J. Plunkett, The evidence base for shaken baby syndrome, *Br. Med. J.* 328 (7442) (2004) 719–720.
- [21] J. Plunkett, Sudden death and myocardial infarction in Minnesota, *N. Engl. J. Med.* 310 (18) (1984) 1187–1188.
- [22] R.F. Gillum, A. Folsom, R.V. Luepker, D.R. Jacobs Jr., T.E. Kottke, O. Gomez-Marin, R.J. Prineas, H.L. Taylor, H. Blackburn, Sudden death and acute myocardial infarction in a metropolitan area, 1970–1980. The Minnesota Heart Survey, *N. Engl. J. Med.* 309 (22) (1983) 1353–1358.
- [23] J. Plunkett, Sudden death in an infant caused by rupture of a basilar artery aneurysm, *Am. J. Forensic Med. Pathol* 20 (2) (1999) 211–214.
- [24] J. Plunkett, Resuscitation injuries complicating the interpretation of premortem trauma and natural disease in children, *J. Forensic Sci.* 51 (1) (2006) 127–130.
- [25] K.V. Lanning, Love, Bombs, and Molesters: an FBI Agent's Journey. Love, Bombs, and Molesters: an FBI Agent's Journey, © Kenneth Lanning, 2018.
- [26] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 23:35, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [27] C.W. Christian, R. Block, Committee on child abuse and neglect, American Academy of pediatrics, abusive head trauma in infants and children, *Pediatrics* 123 (5) (2009) 1409–1411.
- [28] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 75:42, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [29] T.L. Bohan, Strengthening forensic science: a way station on the journey to justice, *J. Forensic Sci.* 55 (1) (2010) 5–7.
- [30] G. Watts, Ayub Khan Ommaya, Neurosurgeon and authority on brain injury, *Lancet* 372 (2008) 1540.
- [31] A.N. Guthkelch, Infantile subdural haematoma and its relationship to whiplash injuries, *Br. Med. J.* 2 (5759) (1971) 430–431.
- [32] J. Caffey, On the theory and practice of shaking infants. Its potential residual effects of permanent brain damage and mental retardation, *Am. J. Dis. Child.* 124 (2) (1972) 161–169.
- [33] A.N. Guthkelch, Problems of infant retino-dural hemorrhage with minimal external injury, *Hous. J. Health Law & Policy* 12 (2) (2012) 201–208.
- [34] Susan Goldsmith, Meryl Goldsmith, The Syndrome, 63:53, 2014. <https://tubitv.com/movies/461263/the-syndrome>.
- [35] N. Lynøe, G. Elinder, B. Hallberg, M. Rosén, P. Sundgren, A. Eriksson, see also Traumatic Shaking, The role of the triad in medical investigation of suspected traumatic shaking, A systematic review. SBU Assessment, Report 255E/2016, 2017, https://www.sbu.se/contentassets/09cc34e7666340a59137ba55d6c55b9/traumatic_shaking_2016.pdf. Insufficient evidence for 'shaken baby syndrome' - a systematic review, *Acta Paediatr.* 106 (7) 1021–1027, doi:10.1111/apa.13760.
- [36] C. Brook, N. Lynøe, A. Eriksson, D. Balding, Retraction of a peer reviewed article suggests ongoing problems with Australian forensic science, *Forensic Sci. Int. Synerg.* 3 (Oct 30) (2021), 100208, <https://doi.org/10.1016/j.fsisyn.2021.100208>.
- [37] I.E. Dror, J. Kukucka, Linear Sequential Unmasking-Expanded (LSU-E): a general approach for improving decision making as well as minimizing noise and bias, *Forensic Sci. Int. Synerg.* 3 (2021), 100161, <https://doi.org/10.1016/j.fsisyn.2021.100161>.

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