David Lawrence Greene casts himself as a retired orthopedic surgeon turned stem-cell guru through his Scottsdale-based R3 Stem Cell LLC, which distributes amniotic stem cells to clinics across the country and claims to have administered stem cells to thousands of patients. What he fails to mention on his website, in brochures, or at presentations filled with hurting people desperate for relief, is that the treatments he offers might not actually work, and he shouldn't really be calling himself "Dr. Greene" anymore — not after the Arizona Medical Board deemed Greene incapable of "recognizing evidence that he may have made a mistake in the care of any patient," despite "the sheer volume of established error," including five deaths and one paralyzation, that led the board to decide Greene was unfit to practice medicine. Greene identifies himself as "Dr. David Greene" on his cellphone voicemail. He told *Phoenix New Times* he owns up to any mistake he made and feels badly for it, but no longer performs procedures himself. Greene told The New Yorker and ProPublica that he had "great outcomes" as a surgeon and "the same rate of complications as other doctors who haven't been sanctioned." He said what happened when he was a surgeon is not relevant to his work today.

Greene told *The New Yorker* and ProPublica, "I don't claim anything" when it comes to stem cells, despite the fact his website proclaims, in all caps, that their treatment centers "change lives every day. Patients frequently avoid surgery while achieving relief from arthritis pain, overuse conditions, COPD, kidney/heart failure, neuropathy, and more."

The findings of the Arizona Medical Board show that Greene graduated from the University of Virginia School of Medicine in 1997. Between 1997 and 1998, he completed a general surgery internship at Maricopa Medical Center. In the following years, he started an orthopedic surgery residence at the Maricopa Medical Center in Phoenix. That residency program was placed on probation, so between 2000 and 2003, Greene completed his residency at Brown University in Rhode Island. After that, in 2004, he completed a fellowship in orthopedic spine surgery at Beth Israel Spine Institute in New York City.

Within months of beginning work as a practicing surgeon back in Arizona, Greene killed someone. Greene's first patient death came on January 31, 2005. A pathology report found a laceration on the patient's abdominal aorta, leading to the person's death. The same day, Greene performed spine surgery on a 51-year-old male patient. The surgery left the man with severe pain in his right leg and an abnormal gait or foot drop, which the board attributed to Greene's failure to "use intraoperative fluoroscopy to document the position" of a screw that was meant to prevent nerve injury.

Then in July 2005, Greene performed a spinal procedure on 35-year-old U.S. Air Force master sergeant James DeJong, The *New Yorker* and ProPublica reported. When DeJong awoke, he learned he'd never walk again: the procedure had left him paralyzed from the waist down.

On January 6, 2006, Greene performed routine surgery on Lola Ollerton. The 78-year-old's husband and five daughters were sitting in the waiting room, reminiscing about their family history, when they were called into another room, one of Ollerton's daughters told The *New Yorker* and ProPublica. Greene told the family there was a

"complication" and their mother had died. The medical board later found that Greene showed "poor surgical judgment" and should not have taken certain actions that led to Ollerton's death.

After examining these four botched surgeries and one other, in which Greene reimplanted hardware in a patient after it was removed due to an infection, severely exacerbating the man's wounds, the Arizona Medical Board was made aware that Greene had killed another patient during surgery in May 2007 and "had an interbody cage migrate into the spinal canal" after performing surgery on another.

Though the Arizona Medical Board was aware that Greene's surgeries had ended or tragically altered the lives of at least seven people from 2005 to 2007, they only suspended his license on August 20, 2007. The suspension was reported by local news at the time; *Tucson.com* wrote that the board considered Greene "an imminent threat to public health and safety."

The news prompted a deluge of new complaints from old patients. The board received and investigated at least 13 new complaints and found that Greene had consistently misplaced screws in patients' spines, and left two more patients with foot drops, plus others with serious infections, blood loss, nerve injuries, and "drainage" from leaking, infected wounds. There was at least one post-surgical meningitis infection as well as patients who required additional surgeries because Greene left medical equipment poorly positioned inside of them the first time around.

The patient who became infected with bacterial meningitis after he left Greene's operating table had to undergo three additional surgical procedures and was left with debilitating chronic pain that requires the use of fentanyl patches.

In summer 2005, the board learned, Greene killed another patient after he "deviated from the standard of care by continuing with the posterior portion of the surgery although he had been notified that MC [the patient] was developing acidosis." Later that year, another one of Greene's patients died after Greene prescribed him a strong, time-release narcotic drug without advising the patient, who had claimed he was "immune" to narcotics, that the drug had a delayed effect. The man died of a drug overdose from a combination of pain and sedative medications.

On several occasions, complaints from post-surgery patients prompted a second evaluation, many of which included CT and/or MRI scans. Even when scans showed Greene had positioned screws poorly, likely triggering the patient's post-surgical pain, Greene refused to accept that he could have made an error.

When another doctor performed a CT scan on one of Greene's post-surgery patients who was complaining of left groin and hip pain, he found the left screw was extended too far. Yet after reviewing the other doctor's CT scan, Greene told the patient "his screws look fine, no issues here."

After his suspension, Greene participated in a "PACE" program that evaluates physicians' competence. The Arizona Medical Board stated that "Dr. Greene had scored in the 10th or lowest percentile on ethics and communication."

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Having reviewed the 13 new cases, the Arizona Medical Board decided to revoke Greene's license. One doctor involved in the review "guestioned whether Green is

safely able to practice, given his obvious lapses in judgment and errors attributable to limited technical proficiency."

"Most of the cases, viewed alone, would be the kind of result that might occur once in a surgeon's career," the medical board wrote in its revocation decision. "The sheer volume of cases created grounds for special concern ... the protection of the public requires that, at some point, the sheer volume of established error be considered." As *The New Yorker* and ProPublica reported, Greene was sued so many times for medical malpractice that he had to file for bankruptcy. So, they reported, he obtained an MBA at Arizona State University, then launched his career hawking stem cells in 2013. Greene is prone to making outsized claims at presentations that misrepresent the efficacy of his stem cell treatments. The *New Yorker* and ProPublica debunked these claims. Greene supplied the publications with lab analyses of his stem cell products. Both showed that only 42 percent — or roughly 600,000 — of the cells in the vials were alive, though Greene has previously stated that there are 10 million live cells in his products. And those could be any cells, not just stem cells, since testing didn't indicate whether they were stem cells or some other type of unhelpful cells.