Naturopathic medical students are required to take courses in physical medicine and manipulation. My personal experiences with spinal manipulation were negative. I saw few long-term results from spinal manipulation performed by the naturopathic physicians and chiropractors whom I observed clinically. I did not understand how chiropractors and naturopathic physicians could claim that they could optimize brain function by working on the spine. I knew that 85% of the nervous system was inside the skull, and I saw no evidence to indicate that spinal manipulation would change the function of the brain. So I began researching cranial manipulation techniques. I wasn't impressed with what I found at first.

Then I heard about Bilateral Nasal Specific (BNS). The sphenoid, the central bone of the skull, could be moved with BNS. If you moved the sphenoid, then the brain would have a different shape, and so the hydraulic actions of blood flow and cerebrospinal fluid flow would be different. This would change the function of the nervous system. I was very excited when I found out that one of my classmates had a brother who claimed to be an expert in BNS.

I first experienced Bilateral Nasal Specific in the winter of 1982 while I was a fourth-year naturopathic medical student at Bastyr University. The treatment was very painful and ineffective. The treating chiropractor told me that my head was too tight for a treatment like BNS. Somehow I knew that he was wrong and that he performed the treatment badly. The next week I called J. Richard Stober, DC, ND of Milwaukie, OR and Seattle, WA and convinced him to lecture to my class. I was inspired by his statements about the need to move the sphenoid to improve the symmetry of the skull, allowing better mechanical function of the skull joints and better hydraulic functioning of the brain. By the end of the lecture, some of my classmates and I had talked our way into his part-time Seattle-area clinic as student observers.

I spent three years watching Dr. Stober, first as an observer, next as a young doctor who was treating himself, later as a clinician who was clumsily treating patients in his new practice and, finally, as a young doctor who shared patients with Dr. Stober. I usually spent one Sunday each month watching him treat patients for six hours or so. Then I went home and practiced what I observed until our shared patients reported to him that our work was nearly identical.

From the time I opened my family practice in Everett, Washington in 1982, BNS was an integral part of my practice. I remember looking at one woman with chronic head pain and remarking on her asymmetry despite her history of more than 100 BNS treatments. By 1984, I was generally dissatisfied with BNS treatment techniques and clinical results. It just didn't work as well as Dr. Stober claimed, and some of his explanations of the nature of the anatomy/physiology of cranial manipulation didn't seem sensible. I was upset at the inability of BNS to correct asymmetrical head shapes. His explanation of the release of the sphenoid by the balloon and the self-correcting mechanism of the meninges and the bones of the skull couldn't be true. If it had worked as claimed, then all heads would become symmetrical as BNS treatments progressed. Instead, the symmetrical treatments of BNS did not address the lack of symmetry at all.

I was convinced that a symmetrical treatment pattern could not correct an asymmetrical head shape. I began experimenting with asymmetrical endonasal balloon treatment patterns in an attempt to produce symmetrical skeletons. First, the treatment patterns were chosen by the way that the skull visually appeared. This proved to have a low degree of success, although it was better than BNS for these difficult cases. Next, I tried applying kinesiology techniques, and this was similarly unsatisfactory. Then I tried palpation of the greater wings of the sphenoid. I found that the sphenoid wings' flexibility changed when I inflated endonasal balloons in different nasal meati. After a year or two, I had definitive maps of cause-and-effect for the endonasal balloon inflation of the nasal meati and the flexibility patterns of the greater wings of the sphenoid.

As the years progressed, I found that I was unable to demonstrate to curious doctors the difference in the palpation patterns of the sphenoid wings. I was confused, even though the clinical successes of the asymmetrical nasal specifics were much better than the old BNS. A Canadian naturopath convinced me to call the work EndoCranial Manipulation (ECM).

In 1989, I had my naturopathic medical license revoked for injecting eight patients with vitamin B-12 and combinations in 1986. Instead of performing manipulations about 30% of my clinic day, I began working for the doctors in my clinic as a physical therapy aide and performed manipulations all day long. My skills in ECM improved. I was invited by Sam Biser to speak at "The Summit Conference on Chronic Fatigue" in Hot Springs, Virginia in 1991. There I met Lowell Eugene Ward, DC, the developer of Spinal Stressology. We talked, and I believed that he understood things about my work that I didn't understand. I studied Spinal Stressology with his son, Steven Ward, DC, treating two patients chosen by the Drs. Ward with ECM while a DC followed their progress. I gradually came to reject the Stressology concepts. The chiropractor following the two patients then stopped the process after three months (instead of five months), saying it was time to take more radiographs. The report that I received indicated that the patients had changed greatly. Excited, I contacted the Wards, thinking that they would embrace the new techniques and would allow me to teach the Stressology community ECM so that we would all get better at manipulation.

Of course, that didn't happen. Instead, I never spoke with the Wards again. On top of that, the two patients, both friends of the Wards, were dismayed to report that their X-rays of their ECM progress were being claimed by Eugene Ward to be his own successful cases! Appalled, I stayed home alone for a while.

In 1993 I applied for reinstatement of my license and was surprised that the State of Washington insisted that I physically leave the State for at least one year before they would consider reinstatement. I moved to San Diego in August of 1993 and began working as a nutritionist and naturopathic cranial manipulation specialist there. But first I mailed out a letter to my patient database, announcing my exit from Washington. Sam Biser read this letter and invited me to interview for "The Last Chance Health Newsletter", where I talked about ECM in April, 1994. Over 1,000 people contacted me, and the MD who ran the clinic I worked in fired me (because of the pressure he was receiving from the California Medical Board for an unrelated incident). I decided to travel around the US alone and treat patients with ECM.

With all of the time I spent alone, I thought about bodies and manipulation a great deal. I taught ECM to Jesse Jutkowitz, DC who showed me the Spinal Stressology techniques that the Wards had been unwilling to show me. He was convinced that my sphenoid wing palpation points could be tested with the Applied Kinesiology techniques of Spinal Stressology. He required standing and seated full spine radiographs to determine the "pelvic drop" (an inferior tilt of the pelvis while seated) so that small changes in the tilt of the occipital bone could be an indicator of the need to manipulate a bone. I tried to do this as I traveled, but I did not trust my results because I had no radiographs to determine the pelvic drop.

One night I had a visual dream (unusual for me) where I saw a skull filled with chunky ground glass and saw that manipulation of the glass chunks could best be accomplished with a long steel rod being pushed deeply though the entire skull (not pushing shallowly or lightly on different areas of the skull). Somehow that dream convinced me that my ECM techniques were wrong. What I had been doing in ECM was to insert and inflate endonasal balloons in all six meati one or two times to loosen up the structure (Dr. Stober's technique), followed with more specific treatment mandated by the sphenoid pattern of asymmetry. I realized that I should only perform the needed treatment of the structural asymmetry, and the old BNS-style loosening up of the skull structure would be detrimental (actually traumatic) to the structure

The Stressology testing techniques were designed to find the joints that, when pushed, would cause the occipital bone to drop in the same direction as the seated pelvis had tilted. These joints were the areas the Stressologists manipulated. They always warned me to push very lightly on a patient, because greater pressures would treat the target joint and the case wouldn't progress properly. I decided to find out what happened when I pushed harder. So I did, and the patient almost fell over. I pushed her again on a vertebra near by, and she was able to withstand a much greater force without difficultly. I realized that the Stressology testing was not Applied Kinesiology but was really a testing technique to determine the patterns of the instability of the structure, allowing us to map the inability of the nervous system to maintain stability with a proprioceptive challenge. When I treated a patient with my improved ECM, the areas of instability with the modified Stressology challenge would be stabilized. I began testing carefully,

and I found that Dr. Jutkowitz' claim was true—we could determine the areas of the sphenoid to move with the palpation areas of the greater wing of the sphenoid evaluated with this peculiar form of stability testing. But Jutkowitz was also wrong because the radiograph wasn't necessary.

NeuroCranial Restructuring had been born! It was the summer of 1995, and it took me until October to determine the name of the technique.

Since that time, the rough techniques of NCR have gradually been replaced each year with gentler, more precise techniques. My doctor-students and I are convinced that it is the next generation of physical manipulation techniques.