



Former Equitation Champion Beats Rare Disease

by Colleen Scott

One of Emily Nitz Woods' handmade greeting cards reads, "We're given new opportunities that replace previous accomplishments." Nothing could be truer for this now 36-year-old mother.

Her previous accomplishments are numerous and include a championship victory pass at the 1988 U.S. Nationals in saddle seat equitation as well as other national and regional awards. She was also a springboard diver and volleyball player. "I thrived on the competition," she says.

Woods began riding at the age of 4. She continued showing throughout her youth, capturing not only the 1988 U.S. National Equitation Championship title, but also top ten awards in side saddle and English pleasure. Her father, Don Nitz, and brother Kryn Nitz also showed in halter and performance, making horses and showing an integral part of family life. Although she didn't compete, her mother, Joanne Nitz, took on the role of horse show mom, supporting the family with her presence.

Throughout her youth, Woods studied with Vicki Humphrey and equitation instructor Debbie Wathen, spending time during the summer months with them at their respective farms. She also spent a week at Lasma Arabians in the mid-1980s. "My summers revolved around taking lessons and showing," she recalls. "I was never into boys, just horses. My prom was always the weekend of the Ohio Buckeye, and I went to the horse show instead. It was really my life."

As with many junior riders, college intervened. She attended Rollins College in Winter Park, Fla., studying to be an elementary education teacher. After college Woods started to get back into showing, earning a U.S. National top ten in purebred country English pleasure showing under the Stachowski Farms banner. She also met and married Kevin Woods and gave birth to her daughter Emma. Then, a diagnosis would change the world as Woods knew it.

Something Amiss

Woods first noticed a problem in her hands in 1999. She suffered from Raynaud's phenomenon, a disease causing the narrowing of the blood vessels to the extremities that (usually hands, but sometimes the knees, nose or ears) leads to a loss of color. Caused by sudden contact with cold temperatures, such as walking through a refrigerated section of the grocery store

or by emotional stimuli, Raynaud's can be accompanied by tingling, numbness or pain until the vessels return to normal size. With the re-warming of the extremities, color returns.

"The swelling was constant and inconvenient, but not a major life change," she says. What would be a major change in her life was the additional diagnosis of the chronic disease scleroderma, news Woods would receive later. Symptoms in Woods' case included a loss in range of motion, stiffness, fatigue and the hardening of the skin as well as internal organs. Her hands started to curl, making it extremely difficult to do anything for herself or take care of then toddler Emma.

By 2004, Woods' prognosis was grim. She required assistance to perform the simplest of tasks, including dressing herself, eating, showering and caring for Emma; pain and anti-inflammatory medications weren't working. Woods said the doctors didn't offer her much hope. "I knew I was dying," she says. "I needed to try something for Emma's sake." Woods took matters into her own hands, researching potential treatment options, stumbling upon what was a relatively unknown and experimental treatment, an autologous stem cell transplant. In this type of procedure, the patient's own harmful stem cells are removed and then replaced with their own healthy stem cells. Her rheumatologist agreed she was a good candidate for the treatment and helped her set up a consultation with Dr. Yu Oyama at Northwestern Hospital in Chicago, a facility she chose because her brother lives nearby and could offer support. Although Woods knew her insurance might not cover the costs of the procedure because of its experimental nature, she proceeded anyway, knowing it was her only chance.

Risky Treatment

In May 2004, Woods said goodbye to Emma for what would be the longest three months of her life. The treatment requires the removal of the patient's own cells, which are then given back after the immune system has been removed as much as possible. According to an article in *Scleroderma Voice*, 2003, #2, by Daniel Furst, M.D., the concept is to remove the cells that are doing harm. "The idea is that one removes the cells that are doing harm and allows a new immune system to develop in the presence of scleroderma. In this case, the new immune system sees scleroderma as 'normal' and does not reach against itself—so the body can heal."



Accomplishments in the show ring included a 1988 U.S. Nationals title in Saddle Seat Equitation for Emily Woods.



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The procedure is done in three steps: mobilization, which is the removal of the stem cells; followed by high-dose immunosuppressive therapy to get rid of the body's abnormal immune system; then the administering of medication to stimulate the new cells. According to Furst, the new immune system is similar to that of a child's. "In fact, patients who undergo stem cell transplantation need revaccination after a year or so, just as if their immune system was a child's."



Woods recalls her experience not only as difficult, but also as isolating and lonely. Because even a common cold had the potential to compromise her immune system, she wasn't able to see her daughter. "I couldn't even have flowers in my room because of the potential germs,"

she shares. During her treatment, Woods' weight dropped to 88 pounds and her kidney function diminished to 6 percent, requiring dialysis. She also fell while in the hospital, breaking her jaw. The severity of the break would require that it be re-broken and set again later.

The stem cell transplant didn't cure Woods' scleroderma, but will hopefully slow down its progression as her new immune system fights the disease. According to Furst, "Stem cell transplantation is a very hopeful therapy in patients with very severe systemic sclerosis. This treatment may be able to significantly improve the quality of life and longevity of patients with the severest form of this disease. On the other

hand, stem cell transplantation is dangerous, and we are only in the beginning stages of learning how to use it to its best advantage and how good it really is."

Although the months of treatment took its toll mentally and physically, Woods credits the procedure, faith and positive thinking with giving her back her life. "Your attitude has a lot to do with the final outcome," she says. "I want to encourage others, and I want my experience to be an inspiration to them. It didn't cure my disease, but it has stopped me from dying," she says.



Parents Joanne and Don Nitz, Emily Woods and brother Kryn Nitz.

The Birth Of Two New Companies

Woods' wish to inspire others came first with her brother Kryn. As he watched Emily suffer from scleroderma and struggle to survive, he was motivated to do something. "I kept asking myself how could I turn this unfortunate situation into a positive?" After doing his own research, Nitz launched a stem cell company called the Longevity Bank. Still in its development phase, the goal of the company is to become the "... leading provider of adult stem cell medical services, making adult stem cell collection, storage and research therapies widely available and within the financial reach of the average person."

According to Nitz, it is a technology that will define the future of medicine. In the company's executive summary, he says: "What would it be like if we all had our own personal biological repair kits standing by? The opportunity exists for us to create the first real life insurance—or as we like to call it, Life Assurance, which is the opportunity for people to bank their own healthy stem cells for future use in the event they become injured or stricken with a serious disease." He says the innovative procedure (which is different from the controversial embryonic stem cell transplant procedures in that the patient uses his or her own stem cells), is currently being used to treat leukemia,

What Is Scleroderma?

The name scleroderma comes from the Greek words "sclero," meaning hard, and "derma," meaning skin. A chronic connective tissue disease, it is classified as one of the autoimmune rheumatic diseases. Scleroderma is similar to rheumatoid arthritis and lupus. When a person has scleroderma, their body's immune system attacks its own tissues, leading to the thickening and tightening of the skin. The disease can also attack internal organs, including the lungs, heart and gastrointestinal tract.

There are approximately 300,000 people in the United States suffering from scleroderma, although according to the Scleroderma Foundation, because of the difficulty diagnosing it, there may be many more. The seriousness of their illnesses depends on which parts of the body are affected. The cause of scleroderma is unknown, and there are many variations in symptoms and treatments from one person to another. The onset of scleroderma usually occurs between the ages of 20 and 50 and is found in women four times as often as men. The causes are unknown at this time. For more information, visit the Scleroderma Foundation website at www.scleroderma.org.



lymphoma, blood disorders, diabetes, autoimmune disease and advanced kidney cancer, and has the potential to be used to treat spinal cord injury, Alzheimer's, Parkinson's and other debilitating diseases. According to the National Institutes of Health, stem cell therapy "has the potential to revolutionize the practice of medicine and improve the quality and length of life."

Nitz, who was by his sister's side during her illness and recovery, along with her parents, sees this as a way to share Emily's miracle with others. "I could market anything—alcohol, cigarettes, lots of different things," he says. "This is something that truly has the potential to help a lot of people and I can make a living doing it. That's very rare. It's the ultimate career."

Besides the Longevity Bank, Woods' illness inspired another business opportunity, this one for Emily herself. "I need to focus the energy I do have and feel useful," she says. "However, I also knew that because of the disease, I couldn't work at a normal job and would have to do something flexible," she says.

Drawing on her experience with positive attitude and thinking, Woods started Dream On Media, an inspirational greeting card company featuring hand-designed and handmade cards for various occasions. "I'm a firm believer that part of the success of my transplant was due to faith and positive thinking. That is something I can share with others through Dream On Media." The cards offer words of encouragement, hope and inspiration with verses written by Woods, including:

- *Celebrate today and create your own festivities.*
- *Find passion in each moment you are given.*
- *Be thankful to share another year gone by.*
- *Allow your dreams to inspire you.*
- *May your gift be in the value of life itself.*

Woods and her family know how important these types of messages have been to her throughout her ordeal. Nitz, who has helped her with the development of the website www.dreamonmedia.com, says words are a powerful tool. "I was there," he says. "We used to write big inspirational messages and hang them on the wall in Emily's room. She had incredible mental strength."

Nitz attributes his sister's recovery to a number of factors: the medical miracle of stem cell transplants; encouraging words from family and friends; Emily's inner strength; and what she gained from riding, showing and competing. "When you compete, you learn how to win gracefully and how to lose gracefully. You learn how to develop the mindset of where you need to be. Those things are very applicable to other parts of your life."

Stem Cell Transplants In Horses?

A similar stem cell treatment technology is being utilized in canine and equine veterinary practice around the country. A company called Vet-Stem is using stem cells to assist in the healing of joints, tendons, ligaments and fractures. The procedure involves extracting a small sample (about two tablespoons) of the horse's own fat, taken from the tail head. The sample is then shipped to the laboratory for processing. The stem cells and companion healing cell populations are concentrated then returned to the veterinarian for injection directly into the injury site. Similar to the Longevity Bank developed by Kryn Nitz, Vet-Stem also offers the Vet-Stem Bank, which provides the storage of stem cells for future use. After the cells are processed, they can be stored in liquid nitrogen either to be used for additional treatments or as "insurance" against future health problems. For more information, go to www.vet-stem.com.

Emily Today

Off dialysis with her kidneys functioning at 58 percent and improving with the help of therapy, Woods is a new person. "I can walk, eat and care for my daughter now, but there are still some things I can't do," she says. "My hands are fused at the joints, very curled in and won't bend very well. However, I'm not giving up on my dream of riding again."

She was able to get on one of her father's horses recently with help. "It was a big accomplishment just to be able to get on and ride for a few minutes.

They had to wrap the reins around my hands, and I didn't have the strength or muscle tone to go for very long. But it was wonderful," she says.

With her strength and determination, don't count Woods out of returning to the Arabian horse show ring. In the meantime, she's enjoying watching her daughter show in lead line.

"Scleroderma took away a lot of things from me, but it brought me a lot of things too. It has given me a different perspective. I've grown to appreciate other things a lot more."

Emily's daughter, Emma Woods, showing in lead line.



Indeed, Woods has learned to replace previous accomplishments with new opportunities. 🐾