World Spine Care

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n. Geoff Outerbridge, World Spine Care's Director of Clinical Development, traveled to Ranthambhore, India in March of 2011 to assist in creating the framework and arranging the infrastructure for a full World Spine Care clinic at the Sevika Hospital in Sawai Madhopur. Later that year, with his wife, Sophie and son, Liam, Dr. Outerbridge arrived in Botswana to begin the World Spine Care pilot project in the rural villages of Mahalapye and Shoshong.

In response to a few *SpineLine* questions, Dr. Outerbridge outlined how he became involved with World Spine Care and describes the organization's work:

What is your background and how did you get interested in medical mission work?

My journey with medical mission work, and in particular, World Spine Care (WSC), finds its roots from early childhood. I come from a family of missionaries. My grandfather was a United Church minister and missionary in Japan from 1910 to 1956, where he taught theology and classics at Kwansei Gakuin University in Nishinomia. My father was born and raised in Japan until he was 13 years old, and my uncle was a medical missionary for the United Church for 13 years in China, where he taught orthopedics at the West China Union University and eventually wrote a book documenting his time in China. I grew up hearing their stories and was always in awe of their dedication and selfless service in an era when volunteer work required such sacrifice. Consequently, I



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have always had a desire to follow in their footsteps and have been on the lookout for this type of opportunity, but I never expected one to come by in such a way that was so ideal. This opportunity to be involved in World Spine Care, a project that involves research, education, clinical work, cultural diversity, travel and so many other challenges, has gone far beyond my highest expectations.

How did you chose this particular project?

There really was no other opportunity for this type of work for someone with my background, so in essence, there was no real choice—I automatically jumped on this when the opportunity came my way.



In Botswana with World Spine Care. Dr. Geoff Outerbridge (right) with wife Sophie (left) and son, Liam.

Simon Dagenais, a friend of mine who had worked with Scott Haldeman for many years, introduced me to World Spine Care. When Simon told me about the project, it took me all of one second to decide that I wanted to be involved. Later that evening, after discussing the opportunity with my wife Sophie, I emailed Simon to reconfirm our interest and to contact Scott on my behalf. I flew to San Francisco later in the year to meet with Scott at the NASS conference, and his introduction went as follows: "Nice to meet you. Let's get to work." So we began. This was all occurring near the beginning of World Spine Care's conception, and as a result, I had the privilege of being involved early on and participating in many different aspects of the project: from marketing, to research, to program development and development of the clinical model of care.

What were the technical challenges in getting things up and running?

The most challenging aspect of the job so far, which has also been the most interesting, has been to acquaint myself with the culture and lifestyle of the local region, in order to complete our goals in a culturally sensitive manner. This includes understanding how to communicate effectively and how to follow up to ensure that work gets done, as well as attempting to speak the native language and follow indigenous customs. It was important for us to start on the right foot with every local partner and to earn their trust by showing respect to their values and ways of life.

Additionally, I had to take on the role as a jack-of-all-trades to build what is needed and fix anything that does not work. Challenges come in many forms, eg, plumbing, electrical and carpentry, and one must find strategies to overcome them. It was fortunate that I brought all my tools as many workers

showed up to the work site without any tools and many did not know how to do the job for which they were hired. I was required to oversee their work to determine if they were fully competent to produce quality and safe results and to ultimately dismiss those who were not qualified.

It was also challenging to find the resources needed to do a particular job. I encountered situations where the materials I required were inaccessible and was forced to change plans or adapt designs to parallel what was available.

Given that WSC is "low-tech," there were not as many "technical" challenges as there were bureaucratic. Departments moved slowly and requests got lost frequently; thus, it was essential to connect with the right person within a department and to call them or show up at their door regularly if anything was to move ahead.





Figure 1. A. Imaging of WSC patient diagnosed at 12 years old with 68° scoliotic curve, and **B.** untreated at 13 years old showing worsening curve progression.

Can you share any interesting success stories?

With respect to spinal disorders and spinal pain, the major problem in developing countries is proper diagnosis and management of cases. Most patients with spinal pain are given pain killers and sent home. The success stories from the WSC clinics usually involve appropriate diagnosis and treatment.

One example, which is representative of many other cases, concerns a mother of two who had back pain since 2008 that prevented her from working, travelling on buses and caring for her children. She was informed by doctors that she would need to undergo surgery as there was no other option to relieve her back pain. As she did not wish to have the surgery, she undertook all the recommendations from the doctors in order to manage the pain. These efforts were unsuccessful and she was still in intense pain when she presented to our clinic. Her pain was of myofascial origin and after one treatment, her pain was significantly less; after two more treatments, she was almost pain-free. Treatment included soft tissue release techniques, spinal manipulative therapy, stretching, home stretching and strengthening program, and education about the causes of her pain and ergonomics/posture. She has now returned to work, is able to take long bus rides without discomfort and can care for her children.

Another case involves a boy who was diagnosed with scoliosis at the age of 12 when his curvature was 68°. No interventions or follow-up were initiated and one year later his curvature was significantly worse (Figure 1). Now, at the age of 14, he has a severe deformity, respiratory compromise and lower limb sensory loss. We are crossing our fingers that one of the surgical volunteers will be able to help him. We have initiated a scoliosis screening program in the local schools that will begin in January with the hope that we can prevent this type of scenario.

What are your future plans?

My future plan is to continue with WSC indefinitely. In particular, I wish to continue to develop and refine a universal model of care in hopes of progressing WSC toward its potential to be an evidence-based, inter-professional leader in the spine care world.

It is my vision to continue traveling with my family, while opening clinics around the world until it is time for our children to attend school. At that time, I hope to continue traveling from a home base and open more clinics, train clinicians, refine the model of care, participate in research and develop community, patient, and medical education programs.

Would you be willing to partner with others who might want to join you?

We are always looking to partner with individuals and organizations who are willing to offer any type of support, experience, expertise or products. We aim to be inclusive and collaborative, and welcome all input to the many projects.

WSC offers endless opportunities and infinite directions. We can never anticipate all the possible opportunities until someone comes along with the idea. Accordingly, it is a great pleasure to explore possibilities and brainstorm with anyone who has a new idea.

Do you accept donations of equipment and money?

We are currently accepting monetary donations, which can be made via the front page of our website at www. worldspinecare.org. (Tax receipts can be issued in most cases.) We are accepting equipment useful to the project.

Equipment and instruments for spine surgeries are welcome; the surgical team, led by Dr. William Watters, coordinates those donations. See the website for details.