

Made in Canada

MEET FOUR INNOVATORS WHO ARE ENHANCING ATHLETIC PROWESS THROUGH BETTER EQUIPMENT AND TREATMENT

Tunnel Visionary

Len Brownlie [AEROSPORTS RESEARCH]

LIFE IS A DRAG. THAT'S LEN BROWNLIE'S BIG INSIGHT, which he embraces from a scientific, rather than an emotional, perspective. Brownlie, an aerodynamics expert, has spent years investigating how speed and

athletic movement are impeded by factors such as wind, water, clothing and equipment. A simple wrinkle on a swim cap, he says, can produce enough drag to keep an athlete off the medal podium.

Based on this knowledge, Brownlie, 47, has helped produce aerodynamically advanced clothing that can improve athletic performance. Remember the full body suit that Australian 400-m runner Cathy Freeman wore as she sped to victory at the 2000 Sydney Olympics? Brownlie was part of the Nike team that designed it. Two years later, U.S. and Dutch athletes wore the speed-skating version of the suit as they earned a combined 16 medals and set eight world records at the Winter Games.

Brownlie's introduction to the field began at 18, when he competed in a 400-m race. He managed the first 200 m in a tailwind-aided 24 sec. But as he ran into the formidable headwind, the final 200 m took him 35 sec. "It was the wind," he says. "I thought, There has to be a better way."

At Simon Fraser University in 1984, Brownlie began a doctoral thesis on aerodynamic sports apparel. Few were interested in the research, he recalls, and he instead pursued a career in the mining sector. But in 1998, Nike executives came across his work and asked if he would serve as a consultant. Since then Brownlie has juggled duties at his mining company (he is director of First Silver Reserve) with the wind-tunnel testing of fabrics at his company, Aerosports Research. Brownlie has also helped develop other products, including swim caps and a drag-resistant soccer ball. So far, only a few Canadian athletes, including hurdler Perdita Felicien, have worn Brownlie's skintight attire. But when Vancouver plays host to the Winter Olympics in 2010, he predicts, we will see a new wave of aerodynamic apparel and equipment:

"It will be a homecoming for a lot of this technology." —By

Wendy Long



WHAT A DRAG!

Brownlie stands in the wind tunnel he uses to develop state-of-the-art sports clothes and equipment