

# SPORT SUPPORT

Sara Renner, Canadian  
cross-country skier

In the first of a regular series **IMPACT** takes you behind the scenes at the Canadian Sport Centre

BY REGAN LAUSCHER

Photography by Ewan Nicholson

**T**o be the world's best, athletes must undergo the right physical, mental, and spiritual training. It takes time, technology, and teamwork. At the Canadian Sport Centre Calgary (CSCC), athletes are surrounded by a team of sport professionals who look after all aspects of their growth and who foster and propel their development and results.



# In order to achieve

an athlete's 'optimal performance,' a Performance Enhancement Team (PET), composed of a team of field experts, works directly with both coach and athlete in specific isolated areas. These include the nutritionist, sport psychologist, strength trainer, biomechanist, sport scientist, physician, and an allied health professional. Together, the providers and coach develop a clear performance goal based on individual assessment and competition analysis of his or her own athletes.

Dr. Dave Smith, Sport Science Coordinator for the CSCC, explains the importance and ideology behind a PET. "The idea of the first PET came into existence around 1996 to 1997, where I instituted a group for the sprint and all-round speed-skating teams and their preparation for Nagano. We would meet about every six weeks and would exchange views and information, bring in the coach and give them information as to how we perceived things were going."

Developing a relationship of mutual trust and respect between the sport-science provider and coach is instrumental in building a successful foundation on which a program can be built, monitored, and adjusted. By building a knowledge base of a particular sport, the sport-science provider can then relay accurate and appropriate information to the coach.

In doing so, the provider would "simply go and observe competition and training, talk to the coach, talk to the athletes, and then figure out what the components are of that sport," says Dr. Smith, "What we usually do is look at where [the athlete is] in their overall development towards being the world's best. It is very important, in our opinion, that an athlete is on a long-term plan, as opposed to short-term gain. In other words, we could change the training in order to get fairly fast improvement, but that would not necessarily be in the best interest of the athlete's long-term performance."

Assessing an athlete requires an understanding, from both the coach's and sport provider's perspective, that each athlete is unique in terms of their individual respons-

es to training, from exercise capacity to recovery potential and stress tolerance.

"For any single athlete, the person who has the most influence can vary. It depends on the characteristics of that athlete and what they need," explains Dr. Smith, "When there is a crisis, one of these people needs to come in, calm the situation down, and give very clear instructions on what needs to be

"You have to be your best every day in training and listen to the guidance of your support team," explains Sara Renner, Canadian Cross-Country Ski Team veteran.



**"It is very important that an athlete is on a long-term plan, as opposed to short-term gain. We could change the training in order to get fairly fast improvement, but that would not necessarily be in the best interest of the athlete's long-term performance."**

done in order to get the athlete back on track. In the end, the members of the PET must not assess their own contribution as a percentage. Every aspect of the athlete needs to move; it's just a question of what that proportion is."

Once a coach develops daily, weekly, and monthly plans (known as micro, meso, and macro cycles), entry and exit assessments are

done to evaluate the effectiveness of that specific training cycle. "To know things are going on the right track, every so often an athlete will do something well—it might be lifting well or running fast—it's doing something that is a notch above what they have done before," says Dr. Smith. "The normal progression for an athlete is to have fairly large jumps at an early age, and then the amount of improvement diminishes with age."

For the coach, sport provider, and the athlete, time, patience, and commitment are

important components in producing a world or Olympic champion. "You can't just say that you want to perform your best. You have to be your best every day in training and listen to the guidance of your support team," explains Sara Renner, Canadian Cross-Country Ski Team veteran. The process of moving up the ranks, which can take six to eight years, comes with a price of frustration, self-doubt, and failure.

Ensuring that an athlete is reinforced with confidence, health, and rest, the team provides support, encouragement, and knowledge for one another.

"The common thought is that 'more is better,' but now we are trying to use the phrase 'less is more,'" states Dr. Smith. "Simply training hard does not translate into increased performance. Emotion plays a huge part of training and success in sport. Constantly pushing oneself can be emotionally draining. Rest takes the athlete physically and mentally away from their normal environment, so much so that having been away for a period of time (two to three weeks), they are eager to get back to that training environment."

"Reaching peak performance can't be done alone," says Olympic speed-skating-gold-medalist Catriona Le May Doan. "From the strength trainers helping me to develop power to physiotherapists helping me to recover, the PET helped me deal with stress, pressure, and often a lack of confidence. They provided me with the expertise and knowledge that when I stand on the 'line,' I am as prepared as I can be, mentally and physically." 