

The Evolution of Applied Research on Sports Physiology and Performance: An Appreciation to the Athletes and Teams for Sharing Their Data

In January 2006, the *International Journal of Sport Physiology and Performance (IJSP)* published its first issue with founding editor Professor David Pyne. *IJSP* is dedicated to advancing the knowledge of sport and exercise physiologists, sport-performance researchers, and other sport scientists by emphasizing work that has direct practical application to enhancing sport performance. *IJSP* started as a niche journal but has grown tremendously in number of submissions, published papers, and impact factor. Clearly the field of applied sport science has developed substantially in the past decade and a half.

Today, *IJSP* has kept its focus on practical applications for physiology and performance in sports, which is reflected by the editorial team, more than 70% of whom work with or provide advice to professional athletes or teams, while the remaining 30% publish extensively in the field of applied sport science. Hand in hand with the development of applied research, many new embedded scientist positions in a variety of sports have been created. There are many examples of mutually beneficial collaboration between research institutions and elite sport teams across the world. For example, in cycling a few teams started working with single embedded scientists about 10 years ago, while most professional teams nowadays work with an entire scientific support team of exercise physiologists, nutritionists, strength and conditioning experts, exercise therapists, and sport psychologists. The working philosophy of the scientific support teams is to use the latest scientific research to optimize training prescription, recovery, and ultimately performance.

We also see a growth of “applied sport science” symposiums as part of large, international conferences such as the annual European College of Sport Science Congress (ECSSS). There are also new applied research conferences such as “Science and Cycling” and the “World Congress on Science and Soccer.” Here, university scientists, embedded scientists, and (expert) coaches exchange knowledge and challenges from their different perspectives, which generates new ideas and frequently leads to a new collaboration between the different parties.

Over the last few years, a range of unique papers have been published on elite athletes. Publications like these require not only the trust and willingness of elite athletes and teams to participate and share their data but also the integrity of the authors to present the data in a scientifically sound way without providing insight into factors that a team is not able or willing to share. Protecting a

competitive advantage and confidentiality are key considerations for athletes, teams, and sporting organizations.

Although applied research like this is not possible without authors who are willing to share data and form this into a publishable manuscript, the participating athletes and teams are often not specifically recognized for their contributions. However, without their support, it is impossible to publish these unique applied research papers and thereby enhance the field of applied sport physiology and performance.

Therefore, we dedicate this editorial to all athletes and teams who have generously shared their time, commitment, expertise, and data with science and truly advanced the field of applied sport science. We hope that the way that these papers have been published will motivate other athletes and teams to share their data, with benefits for both the scientific community and the athletes and teams involved.

*Robert P. Lamberts, IJSP Associate Editor,
Division of Movement Science and Exercise Therapy, Department
of Exercise, Sport and Lifestyle Medicine, Stellenbosch
University, South Africa*

*Teun van Erp, IJSP Social Media Editor,
Division of Movement Science and Exercise Therapy, Department
of Exercise, Sport and Lifestyle Medicine, Stellenbosch
University, South Africa and
INEOS Grenadiers professional cycling team, United Kingdom*

*Dajo Sanders,
Department of Human Movement Science, Faculty of Health,
Medicine and Life Sciences, Maastricht University, Maastricht,
the Netherlands and
Team DSM professional cycling team, the Netherlands*

*Karen E. Welman,
Division of Movement Science and Exercise Therapy, Department
of Exercise, Sport and Lifestyle Medicine, The Movement Lab,
Stellenbosch University, South Africa*

*Øyvind Sandbakk, IJSP Editor-in-Chief,
Department of Neuromedicine and Movement Science,
Norwegian University of Science and Technology, Norway*