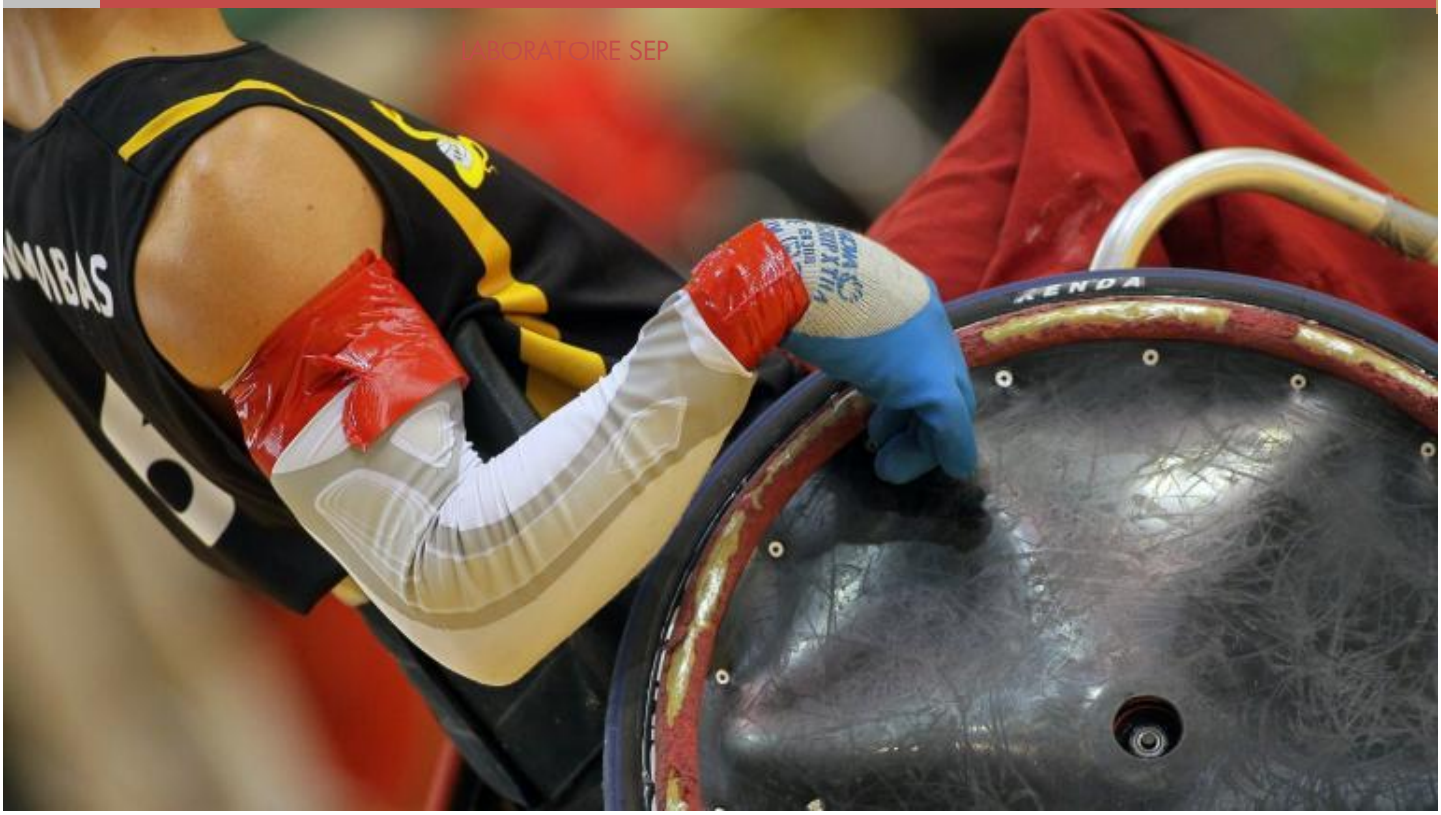

Paraperf

Capitalizing on an interdisciplinary approach, the Paraperf project has been selected by the Programme Prioritaire de Recherche « Sport de Très Haute Performance ». As such, it benefits of an aid from the state managed by l'Agence Nationale de la Recherche as part of the program "d'Investissements d'avenir", reference ANR-19-STHP-0005.

CONTEXT

The main objective is to use research to help Paralympic athletes and their staff maximise their chances of a podium finish at

the Paris Olympic Games. This project is an opportunity for sports science to enter the field of Paralympic sport on a new level and in a unique approach, and to develop tools and specific methods to these disciplines. It involves athletes and staff from the French Badminton Federation, the French Handisport Federation and the French Shooting Federation, and concerns 13 of the 22 Paralympic sports, representing 86% of the events on the 2024 Games programme. Coordinated by INSEP and led by IRMES Director Jean-François Toussaint, it is a partnership between 13 laboratories and a company who specialises in wheelchair instrumentation, in collaboration with the French Badminton Federation, the French Handisport Federation and the French Shooting Federation.

In January 2024, Toulon University launched Le Diplôme Inter-Universitaire (DIU)Parasport to develop the expertise of sports managers and ensure the transfer of knowledge and specific methods to parasport and resulting from the Paraperf project. This diploma involves all the scientific partners of the Paraperf project and the French Handisport Federation.

PRESENTATION

The Paraperf project focuses on three research topics :

The first concerns the results obtained in competition and aims to provide decision-making tools. This work is being carried out at IRMES, under the supervision of Julien Schipman. It consists in analysing the performances of French athletes, modelling their progression trajectory and situating them in the competitive context of their discipline. The aim is to develop and adapt these analysis methods to the specific characteristics of the Paralympic disciplines. In terms of transfer to the field, these tools have been developed with the coaches and made available to them and to the performance directors. Specific analyses and tools have been put in place to help certain disciplines in the race to qualify for and prepare for the Paris Games.

The second aims to optimise the performance of wheelchair athletes. Of the 22 sports at the Paralympic Games, 12 require the use of manual wheelchairs, 9 of which are being studied as part of the project. The main areas of research are: stability for precision sports, manoeuvrability for rugby, basketball and badminton, and reducing rolling resistance for athletics events, etc. This area involves evaluating athletes, developing measurement tools and designing equipment. The aim is to optimise each athlete-equipment pairing through individualised assessment, standardised tests, the development of sensors the automisation of signal processing, and to anticipate the risk of injury, depending on the ergonomics and conditions of use. This work involves multi-disciplinary cooperation to understand the athlete as a whole and to customise our proposals as effectively as possible.

The third involves understanding the psychosocial, legal and environmental factors that are conducive to very high performance, by identifying the development trajectories that characterise the most favourable contexts. Analysis of the data in this area has led to the creation of an exclusive model of the social factors involved in Paralympic performance, incorporating a detailed characterisation of the preparation conditions and relational configurations of Paralympic athletes. The social model of Paralympic performance developed can be applied to all the Paralympic disciplines; it is also aimed at all the people involved in the Paralympic world, i.e. the para-athletes themselves, the coaches, but also the other members of the staff and the federal executives. A guide was produced following the workshops with the management teams of the sports partners. It provides a summary of the work carried out in the first phase of the project, as well as suggestions for

remedial action. A brochure and a website are also available so that everyone can choose the most appropriate feedback.

ACTUALITÉS & MÉDIATION SCIENTIFIQUE

PARTENAIRES

ANNUAIRE

RESSOURCES ET PUBLICATIONS

Contact : nicolas.forstmann@insep.fr - Coordinateur du Projet

Ce site utilise des cookies et vous donne le contrôle sur ce que vous souhaitez activer

✓ OK, tout accepter ✗ Interdire tous les cookies

Personnaliser

URL of the page: https://labos-recherche.insep.fr/fr/paraperf