



**DAVID HUPIN**

*From France to Sweden*



Project: **Regulation of the ANS response to physical activity**

Research topic: **Medecine & Health**

Swedish Institution: **Karolinska Institutet**

French Institution: **Université Jean Monnet, Saint Etienne**

Dates of mobility: **Long stay (One year), starting June 2021**

Program: **SFVE-A (ex TOR)**



## PRESENTATION

[David Hupin](#)'s research focus on the regulation of the autonomic nervous system (ANS) response to physical activity (PA) and their close relationship in the physiopathology of aging and in the prevention of cardiovascular morbidity and mortality. His three main axes are (i) the dose of required PA for successful aging, (ii) the place of the exercise ECG in pre-participation screening, and (iii) the use of ANS as a single marker of efficiency of the regular PA prescribed by the practitioner.

## ACTIVITIES IN SWEDEN

David Hupin did a post-doctoral study of 1 year within the research group of [Magnus Bäck](#), Professor of Cardiology at the [Karolinska University Hospital](#) and Group Leader for Translational Cardiology at the [Center for Molecular Medecine](#) at [Karolinska Institutet](#). The main objective of the mobility project was to identify the mediators and receptors transducing the ANS-regulated resolution of atherosclerotic inflammation, to establish the mechanism involved using innovative in vitro studies in human cells and tissues, and to determine if ANS-simulating the resolution of inflammation reduces atherosclerosis and vascular calcification in vivo.

David Hupin also attended the International Symposium entitled [Cardiometabolic risk and vascular disease, from mechanisms to treatment](#) in 2021 in Stockholm, which was co-organized by the Karolinska Institutet and the Karolinska University Hospital and the [Fondazione Internazionale Menarini](#) (Milan). The two-day program offered a comprehensive update of cardiometabolic risk. The educational objectives were to review and disseminate the latest knowledge about advances in the pathophysiology, diagnosis, and treatment of cardiometabolic risk and to discuss its impact in clinical practice. The scientific program covered a broad spectrum of topics including the relationship between inflammation and atherosclerosis. This Symposium was designed to promote a working and learning environment across specialty borders.