

## F. MARCELLO IAIA

My research, published in prestigious international scientific journals and presented to numerous world conferences, focused on metabolism and the causes of fatigue development during exercise, as well as performance, physiological and skeletal muscle adaptations in response to intermittent high-intensity training, with special reference to soccer. In particular, I researched some of the cellular, molecular and metabolic mechanisms involved in skeletal muscle fatigue during different exercise intensities. I also investigated the effect of changing the type of training on muscle and cardio-respiratory systems, and performance. In addition, I carried out a study on the effect of creatine intake on muscle metabolism and fatigue development during exercise and recovery. I also cooperated in a project examining the beneficial effects of soccer activity to prevent and ameliorate some lifestyle-related diseases. And finally, I conducted football-specific studies looking at the influence of high match frequency on the physiological and psychological profile of sub-elite football players as well as times taken for performance recovery and muscle glycogen re-synthesis after a soccer game. In addition, I've been focusing on developing specific fitness training in relation to the physiological demands of each single player and reproducing the individual movement pattern during a game.