

Making an Impact: Dr. Pascal-André Vendittoli

Dr. Pascal-André Vendittoli has spent his scientific career studying hip and knee arthroplasty, with a focus on the evaluation of new surgical techniques, new technologies and new orthopaedic implants. Over the years, his goal has remained unchanged: offering orthopaedic patients a life free from pain.

Dr. Vendittoli, Professor of Surgery and Senior Clinical Researcher at the Université de Montréal, received the COF's [J. Édouard Samson award in 2015-16](#), an award that recognizes the best career orthopaedic research over a period of five years or more. The award is the COF's top research award, and is intended to both recognize the recipient and support ongoing research efforts. Dr. Vendittoli has achieved much in recent years.



Topping the list of results is the research team's development and implementation of a day surgery protocol at the Maisonneuve-Rosemont Hospital in Montreal. There, in August 2016, Dr. Vendittoli performed one of the first out-patient hip replacements in Quebec. Since that time, the research team continues to study the safety and benefits of same day joint replacement surgery.

"Our goals are to limit hospital stays for patients – thereby saving on hospital costs - while still putting our patients' health and well-being first," says Dr. Vendittoli. "Our protocol requires coordination between all care professionals: nursing, physiotherapy, anaesthesiology, and surgeons. All measures must be in place to ensure our patients are well, and ready to leave in one day."

Currently the team has operated on more than 100 patients, and initial results are very promising. "In addition to reducing hospital length of stay, we cut by half the number of adverse events in comparison to the regular practice. Our protocol is a double win." To improve patients' care across the country, his team is spending significant time sharing their protocol with colleagues in other Canadian hospitals.

In addition, Dr. Vendittoli's team also evaluates specific design features of hip and knee arthroplasty implants. For total hips he is evaluating large diameter ceramic bearings surfaces. His team has performed more than 2500 cases since 2011 and the excellent results of their first 300 cases with a minimum of 5 years of follow up are in-press (the Bone & Joint Journal). He also aims to improve total knee patients' outcomes. For these, he performed an anatomic study of 1000 lower limb CT-scans to evaluate the impacts of mechanical alignment total knee replacement on joint gaps. "These research projects," he says, "will help surgeons understand and evaluate patients' needs, and enable them to provide the best possible care."

With his research work presented more than 300 times at peer reviewed scientific congresses, and his more than 100 published articles, Dr. Vendittoli is a leader in Canadian orthopaedic research. When asked what impact the Samson award had, Dr. Vendittoli replied, "Certainly, my research activities over the past two years were funded partly by the funds presented with the Samson award. Much more important to me, however, was the high recognition of my research program by the COF and my peers in the Canadian Orthopaedic Association. I am sure that receiving the Samson Award helped me to obtain the Senior Clinical Researcher title by the Fonds de la recherche en santé du Québec in 2017."

The COF is proud to count Dr Vendittoli as one of its [Samson Award recipients](#).