Water Frontier Research Center (WaTUS), RIST,

Special Lectures

Title

Using wearable sensors to monitor and assess movement disorders; from validation to answering clinically pertinent questions; challenges and rewards.

Prof. Christian Duval,

Professor

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Faculty of science

University of Quebec in Montreal

Date：June, 3, 2024, 14:00-15:00

Location: Tokyo University of Science Noda campus, Bldg. 7, 6th Floor Auditorium

Abstract:

Wearable sensors give us the opportunity to assess and monitor the symptomatology and movement performance of patients with neurological disorders such as Parkinson's disease outside the realm of the medical clinic. However, this 'remote monitoring' approach brings enormous challenges from a validation standpoint, but also in how wearable sensors can provide complementary information that completes standard clinical evaluations. This presentation will cover the origins of using technology in our lab to better understand the impact of treatments and provide example of the challenges we face when validating newly available wearable sensors. Finally, examples of the use of wearable sensors to answer clinically pertinent questions such as the impact of side effects of treatment in Parkinson's disease on activities of daily living will be presented.

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