

**MAR** **WED**  
**04** **10** **30**  
**AM**Summerlee  
Science Complex  
**SSC 2315**

# DR. JEAN-PHILIPPE JULIEN

ASSISTANT PROFESSOR, DEPARTMENTS OF BIOCHEMISTRY AND IMMUNOLOGY, UNIVERSITY OF TORONTO;  
SCIENTIST, SICKKIDS RESEARCH INSTITUTE; CANADA RESEARCH CHAIR IN STRUCTURAL IMMUNOLOGY

MCB HOST: DR. NINA JONES

## Molecular characterization of antibodies to guide the development of next-generation malaria interventions

Our research focuses on characterizing protective antibodies of high potency against malaria antigens at the two bottlenecks of transmission between the mosquito vector and human host. Particularly, we use reverse vaccinology as an overarching approach to guide the design of novel immunogens for the development of an effective malaria vaccine. This concept is based on interrogating B cell repertoires of humans living in malaria endemic areas or partaking in clinical trials that evaluate emerging vaccine candidates. Our molecular studies uncover inhibitory antibodies that target sites of vulnerability on Plasmodium parasites. These findings have direct implications for the development of biomedical interventions against malaria, including novel vaccine candidates and antibody prophylactics.



All welcome to attend  
Light refreshments will be served

More information on MCB's website:  
[www.uoguelph.ca/MCB](http://www.uoguelph.ca/MCB)