The Centre for Blood Research presents

## **CBR SEMINAR SERIES**

Wednesday, September 14, 2022 1:00PM - 2:00PM PT

DR. DIRK LANGE

## "Combatting Bacterial **Biofilms on Medical Devices -**The Bane of Medicine"

Associate Professor, Department of Urologic Sciences Director of Basic Science Research, The Stone Centre at Vancouver General Hospital

Bacterial contamination of blood products and indwelling urinary devices poses a significant risk for infection and sepsis in transfusion medicine and urology. While much research has gone into the development of strategies to prevent bacterial attachment and biofilm formation on materials used in both spaces, none have been successful at combating the problem. This is mainly due to the fact that previously attempted strategies have utilized mechanisms that target bacteria only, but that are easily rendered ineffective over time by multiple factors present in complex media such as blood and urine. Combating biofilm formation in these settings requires a multi-pronged approach that takes multiple mechanisms driving this phenomenon into consideration. This seminar will provide an overview of a unique cross-disciplinary collaboration between microbiologists, chemists and clinicians to develop novel coating technologies targeting multiple mechanisms driving bacterial adhesion and colonization and ultimately preventing biofilm formation and reducing infection.

Seminar Host: Dr. Jayachandran Kizhakkedathu











## Life Sciences Centre 1003 (LSC3) & Zoom