



Civil and Environmental Engineering

DISTINGUISHED SEMINAR

Who's In Your Water?



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Monday
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103 Churchill Hall
12:00 PM

*This seminar is free and
open to the public.*

Abstract: Every liter of regulation compliant drinking water contains tens of millions of phylogenetically diverse microbial cells, which constitutes the complex drinking water microbiome. This drinking water microbiome migrates daily from water treatment plants into our built environment and can mediate a range of impacts – from public health risks to infrastructure damage. Managing the drinking water microbiome is not only limited to minimizing its detrimental impacts, but also extends to exploiting these microbial communities for beneficial purposes. This approach of managing the drinking water microbiome is transformative, as it shifts our focus from eliminating microbial communities in drinking water systems to exploiting them. Delivering on this outlook requires that we first systematically observe, accurately describe, and clearly elucidate fundamental mechanisms shaping microbial community in drinking water systems. This talk will highlight recent critical insights into

factors regulating microbial communities at the tap across multiple drinking water systems and how these insights may be exploited by integrating with ecological and physiological theories that attempt to capture fundamental mechanisms shaping microbial communities.

Bio: Dr Ameet Pinto is an Assistant Professor in Civil and Environmental Engineering at Northeastern University in Boston, USA. Ameet is a Chemical Engineer with post-graduate degrees in Environmental Engineering from the University of Alaska and Virginia Tech. Prior to joining Northeastern University in 2016, he was a Lecturer/Senior Lecturer at the University of Glasgow. His research focuses on the application of state-of-the-art molecular and modelling tools to tailor the microbiology of drinking water systems to improve the sustainability of treatment processes and enhance the safety and security of drinking water.

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