

# Biology Seminar

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## **Microbial interaction in the male urogenital tract, all urethritis is not created equal**

The male urogenital tract has classically been viewed as essentially sterile outside of sexually transmitted disease. However, the factors that influence susceptibility to male sexually transmitted infections are poorly described and a substantial proportion of men who have symptoms of sexually transmitted disease (urethritis) test negative for all known STI. Recently we have performed the first detailed culture independent investigations of the urethral flora in sexually active and sexually inexperienced cohorts of men. Our data suggest that sexual exposures establish a diverse urethral flora in men, and that many of these organisms are pathogens of the female urogenital tract. In addition we found that men with idiopathic urethritis harbor diverse consortia of uncultivated fastidious microorganisms that resemble those observed in women with urogenital tract infections. Finally, we found that some urogenital pathogens are always present in consortia with other organisms indicating that microorganisms other than classical agents of STI may interact with and relevant to STI and association symptoms. In summary, the male urethra harbors and unexpectedly diverse microbial flora and interactions amongst these microorganisms may be relevant to the acquisition and symptoms of sexually transmitted disease.