## DEPARTMENT OF MECHANICAL ENGINEERING WILLIAM MAXWELL REED SEMINAR SERIES

"Biofilm Mechanics: An Adapted Mechanism for Surface Survival but a drag

**for us"** Paul Stoodley, Ph.D. The Ohio State University

**Abstract:** Bacterial biofilms are microscopic assemblages of bacterial cells usually attached to a surface and held together by a self-produced extracellular polymeric slime (EPS) matrix. Biofilms are ubiquitous in the natural environment and are highly problematic in industry and medicine where they cause corrosion, fouling, contamination and chronic medical and dental infections.

**Bio:** Dr. Paul Stoodley is a Professor in the Departments of Microbial Infection and Immunity and Orthopaedics at The Ohio State University. He also holds an appointment at the University of Southampton in the UK as Professor of Microbial Tribology in the Department of Engineering Sciences. Dr. Stoodley has a broad research interest in bacterial biofilms, drawn from experience in medicine, engineering and basic microbiology. His specific research focus is on biofilms in orthopedic and other device related infections, control of dental biofilms and the role of biofilm mechanics in marine drag and as a biofilm survival strategy. Dr. Stoodley has over 25 years of experience in biofilm research and serves as a key opinion leader and consultant for a number of multi-national companies. Dr. Stoodley has published over 200 articles including reviews, research papers and book chapters in various clinical, engineering and microbiological journals; he has given over 140 seminars where he has presented his research and workshops to a wide variety of academic, industrial and healthcare audiences.

Date: Friday, September 28 Place: CB 114 Time: 3PM Contact: Dr. Alexandre Martin 257-4462

Meet the speaker and have refreshments Attendance open to all interested persons



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