



Timothy Barkham

Senior Consultant, Laboratory Medicine, TTSH
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Research Interests:

- Foodborne *Streptococcus agalactiae*
- Outbreaks, Epidemiology, Diagnostics

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Biography

Dr Barkham qualified at St Thomas' Hospital, London, UK, in 1988. He was certified as a specialist in Clinical Microbiology in 1996. In 1999, after two years at the Hammersmith Hospital, London, he moved to Singapore, where he enjoys a mix of clinical and laboratory medicine, research and teaching, with an adjunct appointment at NUS. His research follows current events presented by an ever-changing microbiological landscape.

Selected Publications

- Barkham T, Sheppard A, Jones N, Chen SL. *Streptococcus agalactiae* that caused meningitis in healthy adults in 1998 are ST283, the same type that caused a food-borne outbreak of invasive sepsis in 2015: an observational molecular epidemiology study. *Clin Microbiol Infect.* 2018; 24(8):923-925.
- Barkham T, Zadoks RN, Azmai MNA, Baker S, Bich VTN, Chalker V, et al. One hypervirulent clone, sequence type 283, accounts for a large proportion of invasive *Streptococcus agalactiae* isolated from humans and diseased tilapia in Southeast Asia. *PLoS Negl Trop Dis.* 2019; 13(6): e0007421.
- Syuhada R, Zamri-Saad M, Ina-Salwany MY, Mustafa M, Nasruddin NN, Desa MNM, Nordin SA, Barkham T, Amal MNA. Molecular characterization and pathogenicity of *S. agalactiae* serotypes Ia ST7 and III ST283 isolated from cultured red hybrid tilapia in Malaysia. *Aquaculture.* 2020; 515:734543.
- Young BE, Ong SWX, Ng LFP ... Barkham T, Lin RZP, et al. Viral dynamics and immune correlates of COVID-19 disease severity. *CID.* 2020; ciaa1280.
- Young BE, Fong SW, Chan YH, Mak TM, Ang LW... Barkham T, et al. Effects of a major deletion in the SARS-CoV-2 genome on the severity of infection and the inflammatory response: an observational cohort study. *Lancet.* 2020; 396(10251): 603-611.

Notable Research Awards & Grants From Past 5 Years

Name of Awards & Grants	Year Obtained
The GIS Super Team Award	2017
A*STAR ETC & D3 Special Recognition Award	2017

TEMASEK FOUNDATION INNOVATES' SINGAPORE MILLENNIUM FOUNDATION for "Assessing the threat of a previously unknown foodborne pathogen (Group B Streptococcus) to the safety and resiliency of the food supply in Singapore"	2018
Glasgow University-The Global Challenges Research Fund for "Southeast Asian group B Streptococcus – Creating a network to address the regional threat to public health and aquaculture"	2018
NHIC-I2P-1710045 Invention Title "Chemical strategies for preventing colistin/polymyxin resistance conveyed by the mobile plasmid mcr"	2018
Universiti Putra Malaysia for "Experimental co-infection of Tilapia Lake Virus and selected pathogenic bacteria in red hybrid tilapia model"	2018
UN FAO (United Nations Food and Agriculture Organisation) for "Emerging Food Safety Threat of group B Streptococcus (GBS) in fish in South-East Asia"	2019
National Healthcare Group (NHG) Outstanding Research Impact Award	2019
CoSTAR-HS/ARGSeedFund/2019/04 for "New drug susceptibility testing and treatment strategies for non-tuberculous mycobacterial infections"	2019
Medical Sciences Cluster Infectious Disease Grant for "Adaptation of the CLO-test for Rapid Susceptibility Testing for <i>Helicobacter pylori</i> "	2019