

DR LUKE BLAGDON SNELL

LUKE.SNELL@KCL.AC.UK

QUALIFICATIONS

MB BS	UCL	Merits
MA	Cambridge University	Medical Tripos (1st class with Prizes)
MSc	UCL	Infection & Immunology (Distinction)
PGCert	KCL	Applied Research Methods (Merit)
PhD	KCL	Infectious Diseases
MRCP	Royal College of Physicians	

EMPLOYMENT

NIHR Clinical Lecturer in infectious diseases &
Clinical Lead for Implementation | NHS Respiratory Metagenomics Network (Sep 2025 - ongoing)
*Guy's & St Thomas' NHS Foundation Trust; King's College Hospital NHS Foundation Trust;
King's College London*

MRC Doctoral Fellowship (Oct 2022-Feb 2025)
King's College London

NIHR Academic Clinical Fellow (Aug 2018 - Oct 2022)
Guys' & St Thomas' NHS Foundation Trust

NIHR Biomedical Research Centre Clinical Fellow (Aug 2020 - Aug 2021)
Guys' & St Thomas' NHS Foundation Trust

Core Medical Trainee (Aug 2015 - Aug 2017)
Barts Health NHS Trust

NIHR Academic Foundation Trainee - Virology (Aug 2013 – Aug 2015)
Royal Free London NHS Trust

RECENT PUBLICATIONS (FULL LIST: ORC ID: 0000-0002-6263-9497)

FIRST AUTHOR

A Alcolea-Medina, LB Snell^{*^}, G Humayun, N Al-Yaakoubi, D Ward, C Alder, V Patel, F Vivian, C Meadows, D Wyncoll, R Paul, N Barratt, R Batra, J Edgeworth, G Nebbia, J Whitehorn (2025) Rapid pan-microbial metagenomics for pathogen detection and personalized therapy on the intensive care unit: a single-centre prospective observational study. **Lancet Microbe** doi:10.1016/j.lanmic.2025.101174

Snell LB et al. A Multinational Case Series Describing Successful Treatment of Persistent Severe Acute Respiratory Syndrome Coronavirus 2 Infection Caused by Omicron Sublineages With Prolonged Courses of Nirmatrelvir/Ritonavir (2024) **Open Forum Infectious Diseases** doi: 10.1093/ofid/ofad612

Snell LB et al The drainome: longitudinal metagenomic characterisation of wastewater from hospital ward sinks to characterize the microbiome and resistome and assess the effects of decontamination interventions (2024) **Journal of Hospital Infection** 10.1016/j.jhin.2024.06.005

Alcolea-Medina A* & Snell LB* et al The ongoing Streptococcus pyogenes (Group A Streptococcus) outbreak in London, United Kingdom in December 2022: a molecular epidemiology study. (2023) **Clinical Microbiology & Infection** doi: 10.1016/j.cmi.2023.03.001

Charalampous T*, Alcolea-Medina A*, Snell LB* *et al* Routine Metagenomics Service for Intensive Care Unit Patients with Respiratory Infection (2023) **American Journal of Respiratory and Critical Care Medicine** 10.1164/rccm.202305-0901OC

Snell LB *et al* Real-Time Whole Genome Sequencing to Guide Patient-Tailored Therapy of Severe Acute Respiratory Syndrome Coronavirus 2 Infection (2022) **Clinical Infectious Diseases** 10.1093/cid/ciac864

Snell LB *et al* Combined epidemiological and genomic analysis of nosocomial SARS-CoV-2 infection early in the pandemic and the role of unidentified cases in transmission (2022) **Clinical Microbiology & Infection** j.cmi.2021.07.040

Snell LB *et al* A descriptive comparison of admission characteristics between pandemic waves and multivariable analysis of the association of the Alpha variant with disease severity in inner London. - **BMJ Open** (2022) doi: 10.1136/bmjopen-2021-055474

Snell LB *et al* Nosocomial transmission of influenza and risk of in-hospital mortality: a prospective, observational study. **J Infect Public Health** (2022) DOI: doi.org/10.1016/j.cmi.2021.07.040

Snell LB *et al* Rapid genome sequencing in hospitals to identify new SARS-CoV-2 variants **Lancet ID** (2021) DOI: 10.1016/S1473-3099(21)00482-5

Charalampous T*, Alcolea-Medina* & Snell LB*, A Application of respiratory metagenomics for COVID-19 patients on the intensive care unit to inform appropriate initial antimicrobial treatment and rapid detection of nosocomial transmission **Genome Medicine** (2021) <https://doi.org/10.1186/s13073-021-00991-y>.

Dupont L*, Snell LB*, Graham C *et al*, Antibody longevity and cross-neutralizing activity of sera from infection with ancestral SARS-CoV-2 and emerging variants of concern **Nature Microbiology** (2021) <https://doi.org/10.1038/s41564-021-00974-0>

Snell LB *et al* SARS-CoV-2 variants with shortened incubation periods necessitate new definitions for nosocomial acquisition **Journal of Infection** (2021) DOI: /10.1016/j.jinf.2021.08.041

Alcolea-Medina A*, Snell LB*, Payne L* *et al* *Variovorax durovernensis* sp. nov., a novel species isolated from an infected prosthetic aortic graft in a human (2021) **International Journal of Systematic and Evolutionary Microbiology** 10.1099/ijsem.0.006184

OTHER SELECTED AUTHORSHIPS

Alder H, Gould S, Hine P, Snell LB *et al* Clinical features and management of human monkeypox: a retrospective observational study in the UK (2022) **Lancet ID** 10.1016/S1473-3099(22)00228-6

Patel A, Bilinska J, Tam J, Da Silva Fontoura D, Mason C, Daunt A, Snell LB *et al* Clinical features and novel presentations of human monkeypox in a central London centre during the 2022 outbreak: descriptive case series (2022) **BMJ** 10.1136/bmj-2022-072410

Roy, A, Eisenhut M, Harris RJ, Rodrigues LC, Sridhar S, Habermann S, Snell LB *et al* Effect of BCG vaccination against Mycobacterium tuberculosis infection in children: systematic review and meta-analysis (2014) **BMJ** 10.1136/bmj.g4643

Lechmere T, Snell LB *et al* Broad Neutralization of SARS-CoV-2 Variants, Including Omicron, following Breakthrough Infection with Delta in COVID-19-Vaccinated Individuals (2022) **mBio** 10.1128/mbio.03798-21

Ming L, Snell LB *et al* Clinical outcomes of patients with and without HIV hospitalized with COVID-19 in England during the early stages of the pandemic: a matched retrospective multi-centre analysis (RECEDE-C19 study) (2022) **HIV Medicine** 10.1111/hiv.13174

CONSORTIA

COG-UK: publications in *Cell, Science, Nature*; Position on HOCi Trial Management Group

RECOVERY Group: publications on tocilizumab and convalescent plasma for COVID-19 in *Lancet*

NHS Respiratory Metagenomics Network: Clinical Lead for Implementation

BOOK CHAPTERS

Snell LB & Patel A 'Bacterial Infections' in MRCP Part 1: Targeted SBAs to help you pass first time (1st edition, ed. Grassby R & Chamberlain G)

Krutikov M & Snell LB 'Gastroenteritis' in The Maudsley Practice Guidelines for Physical Health Conditions in Psychiatry. (1st edition, ed Taylor D, Gaughran F & Pillinger T)

ORAL PRESENTATIONS

Invited speaker: **ESCMID** (2026) From data to decision: clinical interpretation and integration of pathogen sequencing in patient pathways.

Invited speaker: **NorPrem** (2025) Nasjonalt kompetansenettverk for persontilpasset medisin (Oslo): Respiratory metagenomics across the National Health Service in critical care.

Invited speaker: **IBMS** (2025) Institute of Biomedical Science Congress (Birmingham): Pathogen metagenomics for the diagnosis of respiratory infection in critical illness.

Invited speaker: **ICCMg** (2025) International Conference on Clinical Metagenomics (Geneva): Implementation and clinical impact of the Genomics Network of Excellence for severe respiratory infection.

ESCMID (2025): Snell et al: Experience providing a rapid, reactive nanopore isolate sequencing service for bacterial outbreak investigation for hospitals in London, UK.

ESCMID (2025): Snell et al Same-day pan-microbial metagenomics for personalized therapy and pathogen surveillance on the intensive care unit: a single-centre prospective study.

Invited speaker: **BIDI** (2025) Bamrasnaradura Infectious Diseases Institute (Thailand) : AN ICU respiratory metagenomics network for clinical care and pathogen surveillance.

Invited speaker: **NCID** (2025) National Centre for Infectious Diseases (Singapore): Utility of rapid pathogen genome sequencing in hospitals

ECCMID (2024): Snell *et al* The drainome: metagenomics of sink wastewater on hospital wards can monitor antimicrobial resistance and identify reservoirs of carbapenamase-producing organisms

Invited Speaker: **Worldlab – Euromedialab** (2023) Snell. Application of whole genome sequencing in hospitals. pan-Europe congress of the IFCC

ECCMID (2022) Longitudinal evolution of SARS-CoV-2 in persistent infection

ESCV (2021) Prospective observational study to identify nosocomial acquisition of influenza and associated morbidity and mortality.

ECCMID (2021) - Application of respiratory metagenomics to secondary infection on the ICU

ECCMID (2020): Mapping a nosocomial outbreak of measles, coinciding with a period of sustained transmission in South London in 2018.

MEMBERSHIPS

Healthcare Infection Society, ESCMID, IDSA

PRIZES, MERITS, AWARDS.

Merit	Distinction - MSc Infection and Immunity (2013)
Merit	Women's health & communicable diseases (MB BS, Year 4)
Merit	Neurosciences (MB BS, Year 4)
Merit	PG Certificate in Applied Research Methods (2021)
Prize	Robinson College prize – (MB BChir, Year 2)
Prize	Elected into Scholarship of Robinson College (MB BChir, Year 2)

GRANTS & FELLOWSHIPS

Lectureship	NIHR Clinical lectureship (£420K)
Grant	King's Health Fund - CoInvestigator - Paediatric chronic lung disease (2024, £80K)
Grant	Synnovis Transformation Award - Coinvestigator - Implementing pathogen genomics (2023, £500K)
Grant	Synnovis Innovation Award - Coinvestigator - Bacterial WGS for outbreaks(2023, £10K)
Fellowship	MRC Clinical research training fellowship (2022; £320K)
Grant	King's Health Fund - CoInvestigator (2021, £40K)
Grant	Guy's and St Thomas' Charity - Coinvestigator (2018, £100K)