Witness Name:
Professor David Lalloo
Dated: 12.10.2022
Ref: M2/SAGE/01/DL

COVID-19 INQUIRY – MODULE 2

Questionnaire Response – Professor David Lalloo

1: Overview of qualifications, career history, professional expertise and major publications:

Qualifications

1.1. The following table outlines my qualifications:

Table 1- Qualifications

June 1984	MS BS with Honours (2nd class), University of Newcastle upon Tyne
June 1980	Distinction, Stage 1 Part 1
June 1981	Distinction, Stage 2 Part 2
February 1987	MRCP(UK), Royal College of Physicians
July 1994	MD (with commendation), University of Newcastle Upon Tyne
September 1997	CCT in Tropical Medicine, Infectious Diseases and General (Internal) Medicine, Joint Committee on Higher Medical Training
February 2001	FRCP, Royal College of Physicians
July 2006	FFTM RCPS (Glasg), Royal College of Physicians and Surgeons

Employment History

1.2. The following table outlines my employment history:

Table 2- Employment History

January 2019-	Director; Liverpool School of Tropical Medicine
January 2008-	Professor of Tropical Medicine
1999-	Honorary Consultant Physician, Liverpool University Foundation Hospitals Trust
2012-1018	Dean of Clinical Sciences and International Public Health, LSTM
2009-2018	Director, Wellcome Trust Liverpool Glasgow Centre for Global Heath Research
2009-2018	Director, Wellcome Trust Clinical PhD Programme
2001-2019	Clinical Lead and Director, Diagnostic Laboratory, Liverpool School of Tropical Medicine

Professional Bodies and Advisory Groups

1.3. The following table outlines the professional bodies and advisory groups that I have been a member of:

Table 3- Professional Bodies and Advisory Groups

2020-	Chair: Chief Medical Officer COVID 19 Prophylaxis Oversight Group
2020-	Advisor to COVID 19 Therapeutic Task Force and Antiviral Task Force
2018-	Chair: National Institute for Health and Care Research (NIHR) Global Health Research (GHR) Independent Scientific Advisory Group
2010-2019	Chair: Public Health England Advisory Committee on Malaria Prevention
2010-2020	Medical Research Council Global Health Advisory Group
2016	Chief Medical Officer Scientific Advisory Group on Zika

2014-2015	Chief Medical Officer Scientific Advisory Group on Emergencies (SAGE) for Ebola
2010-	Public Health England Expert Advisory Group on Anti-venoms
2021-	Honorary Consultant Advisor for Tropical medicine for the Army
2011-	National Poisons Service Advisor on Envenoming
2010-2019	Joint Committee on Vaccination and Immunisation Travel Sub-group
2010-2015	Scottish Malaria Advisory Group
2003-2021	Steering Committee of the National Travel Health Network and Centre (NATHNAC)
2006-2010	MRC Ethics, Regulation and Public Involvement Committee
2003-2005	MRC Ad-hoc Advisory Panel on Research Ethics
2016-2019 (member since 2009-)	Chair: Wellcome Trust/MRC/DfID/DH Clinical Trials Panel
2020-	MRC Applied Global Health Research Board
2020-	UKRI Future Leaders Panel
2020-	African Academy of Sciences DELTA Panel
2015-2019	Wellcome Trust Science Interview Panel
2010-	MRC/DFID African Research Leader Panel
2016-2020	National Institute for Health and Care research (NIHR) Global Health Research Groups and Unit Panel
2014-2015	Wellcome Trust Panel on Ebola Interventions
2010-2015	MRC Infection and Immunity Board
2008-2016	Meningitis Research Foundation Scientific Panel
2004-2007	Wellcome Trust Tropical and Clinical Immunology and Infectious Diseases Committee, (2004 to 2007).
2005/2016-	Wellcome Trust Site Reviews:

	SE Asia Unit (2005) Africa Centre (2016- Chair)
2015-2016	MRC Site Reviews: MRC Clinical Trial Unit (2015) MRC/UVRI Uganda Research Unit on AIDS (2016)

1.4. I am Director and Professor of Tropical Medicine at the Liverpool School of Tropical Medicine. I am an academic clinician in Tropical Medicine and Infectious Diseases, with a longstanding research interest in clinical trials and multidisciplinary research, particularly in HIV and associated infections, malaria and envenoming. I have worked extensively in the UK, Africa (Malawi, Uganda, Kenya and South Africa) and Asia (Sri Lanka, Vietnam and Papua New Guinea).

1.5. My research has generated new knowledge with over 250 publications, including in journals such as *PLOS Medicine*, *Lancet Infectious Diseases, the NEJM* and *Science,* and my work has influenced international guidelines and policy. I have had significant roles in supporting high quality science and UK global health policy through positions on a number of scientific funding panels and advisory bodies such as the MRC Global Health Group and Chair of the NIHR Global Health Advisory Group. I have given advice to the Department for International Development (which was subsumed into the Foreign and Commonwealth and Development Office in September 2020), chaired the Public Health England Advisory Committee and was a participant of UK SAGE for Ebola and the pre-SAGE for Zika

Publications

1.6. I have 253 publications in total which are accessible here**;** **https://orcid.org/0000-0001-7680-2200)**

1.7. Below is a selection of my major publications**:**

1.8. Single-Dose Liposomal Amphotericin B Treatment for Cryptococcal Meningitis. Jarvis JN, Lawrence DS, Meya DB et al , (**Lalloo DG** 40th of 42 authors).N Engl J Med. 2022 Mar 24;386(12):1109-1120. doi: 10.1056/NEJMoa2111904.

1.9. Walker PGT, Whittaker C, Watson OJ et al (**Lalloo DG** 47th of 49 authors). Ferguson NM, Ghani AC. The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries. *Science*. 2020 Jul 24;369(6502):413-422. doi: 10.1126/science.abc0035. Epub 2020 Jun 12.

1.10. Molloy SF, Kanyama C, Heyderman RS et al (**Lalloo DG** 32nd of 37 authors). Antifungal Combinations for Treatment of Cryptococcal Meningitis in Africa. *N Engl J Med*. 2018 Mar 15;378(11):1004-1017. doi: 10.1056/NEJMoa1710922.

1.11. Kasturiratne A, Pathmeswaran A, Wickremasinghe AR, Jayamanne SF, Dawson A,.Isbister GK, de Silva HJ, **Lalloo DG**. The socio-economic burden of snakebite in Sri Lanka. *PLoS Negl Trop Dis*. 2017 Jul 6;11(7):e0005647.

1.12. Wall EC, Mukaka M, Scarborough M, Ajdukiewicz KM, Cartwright KE, Nyirenda M, Denis B, Allain TJ, Faragher B, **Lalloo DG***, Heyderman RS*. (* joint senior author). Prediction of outcome from adult bacterial meningitis in a high HIV seroprevalence, resource-poor setting using the Malawi Adult Meningitis Score (MAMS). *Clin Infect Dis*. 2016 Dec.

1.13. Beardsley J, Wolbers M, Kibengo FM et al, (**Lalloo DG** 31st of 32 authors). Adjunctive Dexamethasone in HIV-Associated Cryptococcal Meningitis. *New England Journal of Medicine*. 2016 Feb 11;374(6):542-554

1.14. MacPherson P, **Lalloo DG**, Webb EL, Maheswaran H, Choko AT, Makombe SD, Butterworth AE, van Oosterhout JJ, Desmond N, Thindwa D, *et al*. Effect of optional home initiation of HIV care following HIV self-testing on antiretroviral therapy initiation among adults in Malawi: a randomized clinical trial. *JAMA.* 2014 Jul 23-30;312(4):372-9

1.15. Day JN, Chau TT, Wolbers M, Mai PP, Dung NT, Mai NH, Phu NH, Nghia HD, Phong ND, Thai CQ, Thai le H, Chuong LV, Sinh DX, Duong VA, Hoang TN, Diep PT, Campbell JI, Sieu TP, Baker SG, Chau NV, Hien TT, *et al* (**Lalloo DG** joint senior author). Combination antifungal therapy for cryptococcal meningitis. *New England Journal of Medicine*. 2013 Apr 4;368(14):1291-30

1.16. Parkes-Ratanshi R, Wakeham K, Levin J, Namusoke D, Whitworth J, Coutinho A, Kenya Mugisha N, Grosskurth H , Kamali A, **Lalloo DG**. Primary prophylaxis of cryptococcal disease using fluconazole in HIV positive Ugandan

adults - a double blind, randomised, placebo controlled trial. *Lancet Infectious Diseases.* 2011 Dec;11(12):933-41

1.17. De Silva HA, Pathmeswaran A, Jayamanne S *et al* (**Lalloo DG** 12th out of 13 authors). Promethazine, hydrocortisone, and low-dose adrenaline (alone and in combination) in the prevention of acute adverse reactions to antivenom following snakebite: a randomised, double blind, placebo-controlled trial. *PLOS Medicine.* 2011 May; 8(5):e1000435

1.18. Ajdukiewicz KM, Cartwright KE, Scarborough M, Mwambene JB, Goodson P, Molyneux ME, Zijlstra EE, French N, Whitty CJ, **Lalloo DG**. Glycerol adjuvant therapy in adults with bacterial meningitis in a high HIV seroprevalence setting in Malawi: a double-blind, randomised controlled trial. *Lancet Infectious Diseases*. 2011 Apr;11(4):293-300

1.19. Kasturiratne A, Wickremasinghe AR, de Silva N, Gunawardena NK, Pathmeswaran A, Premaratna R, Savioli L, **Lalloo DG,** de Silva HJ. The global burden of snakebite: a literature analysis and modelling based on regional estimates of envenoming and deaths. *PLoS Med*. 2008 Nov 4;5 (11):e218. doi:10.1371/journal.pmed.0050218

2: List of groups I participated in and the relevant time period:

2.1. During the COVID pandemic, I was briefly a participant of SAGE for its first two meetings only. These were on 20 and 28 January 2020. I have not been a participant of SAGE or any other of its formal sub-groups subsequently, although I have sat on a number of DHSC advisory groups and committees.

3: Overview of involvement in groups between January 2020 and February 2022:

3.1. I became a participant of SAGE at the request of the Government Office for Science as a science expert. I suspect this was related to my previous experience with SAGE for other infectious diseases, being the Ebola and Zika outbreaks.

3.2. I was only present at the first two SAGE meetings on 20 and 28 January 2020. These were at the very initial stages when we were just becoming aware of the potential harm that SARS CoV2 could cause. I joined in general discussion

about the risk that emerging events in China posed to UK public health and the actions that might be needed to protect the UK, including potential restrictions on travel and the need to expand diagnostic capability

3.3. During those two meetings, I did not provide written evidence or research to SAGE.

4: Summary of documents to which I contributed for the purposes of advising groups:

4.1. I did not contribute any specific documents to SAGE.

5: Summary of articles, interviews and/or evidence:

5.1. I have not written any articles or publicly commented on the UK's response to COVID.

6: Views as to whether the work of the groups in responding to the Covid-19 pandemic succeeded in its aims.

6.1. As I was only present for the first two meetings of SAGE, it is difficult to comment on the specific question raised on the functioning of SAGE in the UK response. From an external perspective, I think that the constitution of participants for SAGE and its sub-groups was appropriate, and the scientific information/evidence presented to and generated by SAGE was the best available from UK scientists. Generally, the advice and recommendations were sensible

7: Lessons that can be learned

The key lessons from my perspective are:

7.1. Public health pandemic preparedness has to be properly funded. This will inevitably mean a degree of redundancy and excess cost in the system when there is no crisis, but it is impossible to ramp up a response when a crisis occurs if there has been inadequate preparation

7.2. The public health system generally needs to be adequately funded – the repeated changes in the system over the last twenty years has devalued the role of health protection and left the country completely exposed.

7.3. Tight central control of issues such as pathogen testing or tracing cases simply does not work. The centre needs to set broad principles/ protocols but then allow all the local expertise to implement. The plans for controlling testing centrally, in particular, were a disaster. The initial reluctance to let local laboratories set up their own testing, and the attempt to have testing done at central laboratories (lighthouse labs), greatly restricted the ability to meet the need for large numbers of tests in the early phase of the pandemic.

7.4. Co-ordination between the NHS, PHE/UKHSA, social care providers and local authorities needs to be significantly improved.

8: Documents that I hold

8.1. I do not hold any documentation or evidence.