## UK COVID-19 Inquiry: Module 2B - Rule 9 Request to Professor Stephen Jolles- Reference: M2B/SJ/01

Please provide the following information:

1. A brief overview of your qualifications, career history, professional expertise and major publications.

MBChB Hons, BSc Hons, MSc, MRCP, FRCPath, PhD

Consultant Clinical Immunologist and Honorary Professor of Clinical Immunology. My training was in clinical immunology and allergy. I am Clinical Lead for the Immunodeficiency Centre for Wales and co-lead the hub NHS Immunology Laboratory for Wales. I am also Clinical Lead Adult Syndrome without a name (SWAN) Clinic.

2. A list of the groups (i.e. TAG and/or any of its subgroups) in which you have been a participant, and the relevant time periods. Please also confirm if you are or have been a participant in SAGE or other relevant groups.

TAG and Testing TAG member with presentations to Vaccination, Nosocomial and Nursing Leads groups. Not a member of SAGE.

- 3. An overview of your involvement with those groups between January 2020 and May 2022, including:
- a. When and how you came to be a participant; Invited onto TAG and Testing TAG
- b. The number of meetings you attended, and your contributions to those meetings; and

I have attached a spreadsheet from the TAG secretariat with details of my attendance at TAG.

c. Your role in providing research, information and advice.

This was on the basis of Immunology, Immunodeficiency and Laboratory expertise.

4. A summary of any documents to which you contributed for the purpose of advising TAG and/or its related subgroups on the Covid-19 pandemic. Please include links to those documents where publicly available.

I have contributed to lateral flow testing, dried blood spot testing, nosocomial infection, vaccination in pregnant women and immunodeficient patients in discussion and with research data – with publications listed below.

5. A summary of any articles you have written, interviews and/or evidence you have given regarding the work of the above-mentioned groups and/or the Welsh Government's response to the Covid-19 pandemic. Please include links to those documents where publicly available.

The majority of the articles listed are freely available from Pubmed and I would be happy to provide details if not.

Evaluation of the shielding initiative in Wales (EVITE Immunity): protocol for a quasiexperimental study.

Evans BA, Akbari A, Bailey R, Bethell L, Bufton S, Carson-Stevens A, Dixon L, Edwards A, John A, **Jolles S**, Kingston MR, Lyons J, Lyons R, Porter A, Sewell B, Thornton CA, Watkins A, Whiffen T, Snooks H.BMJ Open. 2022 Sep 8;12(9):e059813. doi: 10.1136/bmjopen-2021-059813.PMID: 36691218 Free PMC article.

Immunodeficient patient experience of emergency switch from intravenous to rapid push subcutaneous immunoglobulin replacement therapy during coronavirus disease 2019 shielding.

Morgan C, Jolles S, Ponsford MJ, Evans K, Carne E.Curr Opin Allergy Clin Immunol. 2022 Dec 1;22(6):371-379. doi: 10.1097/ACI.000000000000864. Epub 2022 Sep 27.PMID: 36165464 Free PMC article.

Maternal SARS-CoV-2 sero-surveillance using newborn dried blood spot (DBS) screening specimens highlights extent of low vaccine uptake in pregnant women.

Moat SJ, Hillier S, de Souza S, Perry M, Cottrell S, Lench A, Payne H, Jolles S. Hum Vaccin Immunother. 2022 Jun 22:2089498. doi: 10.1080/21645515.2022.2089498. Online ahead of print. PMID: 35731129

Response to COVID-19 booster vaccinations in seronegative people with multiple sclerosis.

Tallantyre EC, Scurr MJ, Vickaryous N, Richards A, Anderson V, Baker D, Chance R, Evangelou N, George K, Giovannoni G, Harding KE, Hibbert A, Ingram G, Jolles S, Jones M, Kang AS, Loveless S, Moat SJ, Robertson NP, Rios F, Schmierer K, Willis M, Godkin A, Dobson R.Mult Scler Relat Disord. 2022

Aug;64:103937. doi: 10.1016/j.msard.2022.103937. Epub 2022 Jun 4.PMID: 35700625 Free PMC article.

Outcomes following SARS-CoV-2 infection in patients with primary and secondary immunodeficiency in the UK.

Shields AM, Anantharachagan A, Arumugakani G, Baker K, Bahal S, Baxendale H, Bermingham W, Bhole M, Boules E, Bright P, Chopra C, Cliffe L, Cleave B, Dempster J, Devlin L, Dhalla F, Diwakar L, Drewe E, Duncan C, Dziadzio M, Elcombe S, Elkhalifa S, Gennery A, Ghanta H, Goddard S, Grigoriadou S, Hackett S, Hayman G, Herriot R, Herwadkar A, Huissoon A, Jain R, Jolles S, Johnston S, Khan S, Laffan J, Lane P, Leeman L, Lowe DM, Mahabir S, Lochlainn DJM, McDermott E, Misbah S, Moghaddas F, Morsi H, Murng S, Noorani S, O'Brien R, Patel S, Price A, Rahman T, Seneviratne S, Shrimpton A, Stroud C, Thomas M, Townsend K, Vaitla P, Verma N, Williams A, Burns SO, Savic S, Richter AG.Clin Exp Immunol. 2022 Jan 28:uxac008. doi: 10.1093/cei/uxac008. Online ahead of print.PMID: 35641155 Free PMC article.

Case Report: Generalised Panniculitis as a Post-COVID-19 Presentation in Aicardi-Goutières Syndrome Treated With Ruxolitinib.

Pararajasingam A, Bradley RE, Evans J, Lowe A, Goodwin R, Jolles S. Front Pediatr. 2022 Apr 25;10:837568. doi: 10.3389/fped.2022.837568. eCollection 2022.PMID: 35547545 Free PMC article.

An Analysis of Serological Response and Infection Outcomes Following Oxford-AstraZeneca (AZD1222) and Pfizer-BioNTech (mRNA BNT162b2) SARS-CoV-2 Vaccines in Kidney and Kidney-pancreas Transplants.

Asderakis A, Khalid U, Koimtzis G, Ponsford MJ, Szabo L, Chalklin C, Bramhall K, Grant L, Moat SJ, Humphreys IR, Jolles SR. Transplantation. 2022 Jul 1;106(7):1421-1429. doi: 10.1097/TP.000000000004105. Epub 2022 Mar 8.PMID: 35283457 Free PMC article.

Mechanically ventilated patients shed high titre live SARS-CoV2 for extended periods from both the upper and lower respiratory tract.

Saud Z, Ponsford M, Bentley K, Cole JM, Pandey M, Jolles S, Fegan C, Humphreys I, Wise MP, Stanton R.Clin Infect Dis. 2022 Mar 1:ciac170. doi: 10.1093/cid/ciac170. Online ahead of print.PMID: 35231086 Free PMC article.

COVID-19 Vaccine Uptake and Efficacy in a National Immunodeficiency Cohort.

Ponsford MJ, Evans K, Carne EM, Jolles S; Immunodeficiency Centre for Wales and Division of Population Medicine. J Clin Immunol. 2022 May;42(4):728-731. doi: 10.1007/s10875-022-01223-7. Epub 2022 Feb 11.PMID: 35149962 Free PMC article. No abstract available.

Treatment of chronic or relapsing COVID-19 in immunodeficiency.

Brown LK, Moran E, Goodman A, Baxendale H, Bermingham W, Buckland M, AbdulKhaliq I, Jarvis H, Hunter M, Karanam S, Patel A, Jenkins M, Robbins A, Khan S, Simpson T, **Jolles S**, Underwood J, Savic S, Richter A, Shields A, Brown M, Lowe DM.J Allergy Clin Immunol. 2022 Feb;149(2):557-561.e1. doi: 10.1016/j.jaci.2021.10.031. Epub 2021 Nov 12.PMID: 34780850 Free PMC article.

Persistent COVID-19 Infection in Wiskott-Aldrich Syndrome Cleared Following Therapeutic Vaccination: a Case Report.

Bradley RE, Ponsford MJ, Scurr MJ, Godkin A, Jolles S; Immunodeficiency Centre for Wales.J Clin Immunol. 2022 Jan;42(1):32-35. doi: 10.1007/s10875-021-01158-5. Epub 2021 Oct 29.PMID: 34714497 Free PMC article. No abstract available.

A Systematic Review and Meta-Analysis of Inpatient Mortality Associated With Nosocomial and Community COVID-19 Exposes the Vulnerability of Immunosuppressed Adults.

Ponsford MJ, Ward TJC, Stoneham SM, Dallimore CM, Sham D, Osman K, Barry SM, Jolles S, Humphreys IR, Farewell D.Front Immunol. 2021 Oct 6;12:744696. doi: 10.3389/fimmu.2021.744696. eCollection 2021.PMID: 34691049 Free PMC article.

COVID-19 Vaccine Response in People with Multiple Sclerosis.

Tallantyre EC, Vickaryous N, Anderson V, Asardag AN, Baker D, Bestwick J, Bramhall K, Chance R, Evangelou N, George K, Giovannoni G, Godkin A, Grant L, Harding KE, Hibbert A, Ingram G, Jones M, Kang AS, Loveless S, Moat SJ, Robertson NP, Schmierer K, Scurr MJ, Shah SN, Simmons J, Upcott M, Willis M, Jolles S, Dobson R.Ann Neurol. 2022 Jan;91(1):89-100. doi: 10.1002/ana.26251. Epub 2021 Nov 17.PMID: 34687063 Free PMC article.

Fatigue Symptoms Associated With COVID-19 in Convalescent or Recovered COVID-19 Patients; a Systematic Review and Meta-Analysis.

Rao S, Benzouak T, Gunpat S, Burns RJ, Tahir TA, Jolles S, Kisely S.Ann Behav Med. 2022 Mar 1;56(3):219-234. doi: 10.1093/abm/kaab081.PMID: 34665858 Free PMC article.

COVID-19 and X-linked agammaglobulinemia (XLA) - insights from a monogenic antibody deficiency. Ponsford MJ, Shillitoe BMJ, Humphreys IR, Gennery AR, **Jolles S.**Curr Opin Allergy Clin Immunol. 2021 Dec 1;21(6):525-534. doi: 10.1097/ACI.00000000000000792.PMID: 34596095

Persistent SARS-CoV-2 infection: the urgent need for access to treatment and trials. Moran E, Cook T, Goodman AL, Gupta RK, **Jolles S**, Menon DK, Roberts DJ, Savic S, Shankar-Hari M, Brown M, Lowe DM.Lancet Infect Dis. 2021 Oct;21(10):1345-1347. doi: 10.1016/S1473-3099(21)00464-3. Epub 2021 Aug 16.PMID: 34411531

Burden of nosocomial COVID-19 in Wales: results from a multicentre retrospective observational study of 2508 hospitalised adults.

Ponsford MJ, Jefferies R, Davies C, Farewell D, Humphreys IR, Jolles S, Fairbairn S, Lewis K, Menzies D, Benjamin A, Thaivalappil F, Williams C, Barry SM.Thorax. 2021 Dec;76(12):1246-1249. doi: 10.1136/thoraxjnl-2021-216964. Epub 2021 Jul 22.PMID: 34301738

COVID-19 in patients with primary and secondary immunodeficiency: The United Kingdom experience. Shields AM, Burns SO, Savic S, Richter AG; UK PIN COVID-19 Consortium. J Allergy Clin Immunol. 2021 Mar;147(3):870-875.e1. doi: 10.1016/j.jaci.2020.12.620. Epub 2020 Dec 15.PMID: 33338534

Development of a high-throughput SARS-CoV-2 antibody testing pathway using dried blood spot specimens.

Moat SJ, Zelek WM, Carne E, Ponsford MJ, Bramhall K, Jones S, El-Shanawany T, Wise MP, Thomas A, George C, Fegan C, Steven R, Webb R, Weeks I, Morgan BP, Jolles S. Ann Clin Biochem. 2021 Mar;58(2):123-131. doi: 10.1177/0004563220981106. Epub 2020 Dec 26.PMID: 33269949

Coronavirus disease 2019 in patients with inborn errors of immunity: An international study. Meyts I, Bucciol G, Quinti I, Neven B, Fischer A, Seoane E, Lopez-Granados E, Gianelli C, Robles-Marhuenda A, Jeandel PY, Paillard C, Sankaran VG, Demirdag YY, Lougaris V, Aiuti A, Plebani A, Milito C, Dalm VA, Guevara-Hoyer K, Sánchez-Ramón S, Bezrodnik L, Barzaghi F, Gonzalez-Granado LI, Hayman GR, Uzel G, Mendonça LO, Agostini C, Spadaro G, Badolato R, Soresina A, Vermeulen F, Bosteels C, Lambrecht BN, Keller M, Mustillo PJ, Abraham RS, Gupta S, Ozen A, Karakoc-Aydiner E, Baris S, Freeman AF, Yamazaki-Nakashimada M, Scheffler-Mendoza S, Espinosa-Padilla S, Gennery AR, **Jolles S**, Espinosa Y, Poli MC, Fieschi C, Hauck F, Cunningham-Rundles C, Mahlaoui N; IUIS Committee of Inborn Errors of Immunity, Warnatz K, Sullivan KE, Tangye SG.J Allergy Clin Immunol. 2021 Feb;147(2):520-531. doi: 10.1016/j.jaci.2020.09.010. Epub 2020 Sep 24.PMID: 32980424

Complement Inhibition with the C5 Blocker LFG316 in Severe COVID-19.

Zelek WM, Cole J, Ponsford MJ, Harrison RA, Schroeder BE, Webb N, Jolles S, Fegan C, Morgan M, Wise MP, Morgan BP.Am J Respir Crit Care Med. 2020 Nov 1;202(9):1304-1308. doi: 10.1164/rccm.202007-2778LE.PMID: 32897730

Development of a high-sensitivity ELISA detecting IgG, IgA and IgM antibodies to the SARS-CoV-2 spike glycoprotein in serum and saliva.

Faustini SE, Jossi SE, Perez-Toledo M, Shields AM, Allen JD, Watanabe Y, Newby ML, Cook A, Willcox CR, Salim M, Goodall M, Heaney JL, Marcial-Juarez E, Morley GL, Torlinska B, Wraith DC, Veenith TV, Harding S, **Jolles S**, Ponsford MJ, Plant T, Huissoon A, O'Shea MK, Willcox BE, Drayson MT, Crispin M, Cunningham AF, Richter AG.Immunology. 2021 Sep;164(1):135-147. doi: 10.1111/imm.13349. Epub 2021 May 24.PMID: 33932228 Free PMC article.

Examining the utility of extended laboratory panel testing in the emergency department for risk stratification of patients with COVID-19: a single-centre retrospective service evaluation. Ponsford MJ, Burton RJ, Smith L, Khan PY, Andrews R, Cuff S, Tan L, Eberl M, Humphreys IR, Babolhavaeji F, Artemiou A, Pandey M, **Jolles SRA**, Underwood J.J Clin Pathol. 2022 Apr;75(4):255-262. doi: 10.1136/jclinpath-2020-207157. Epub 2021 Feb 19.PMID: 33608408

6. Your views as to whether the work of the above-mentioned groups in responding to

the Covid-19 pandemic (or Wales's response more generally) succeeded in its aims. This may include, but is not limited to, your views on:

- a. The composition of the groups and/or their diversity of expertise;
- b. The way in which the groups were commissioned to work on the relevant issues;
- c. The resources and support that were available;
- d. The advice given and/or recommendations that were made;
- e. The extent to which the groups worked effectively together; and 3
- f. The extent to which applicable structures and policies were utilised and/or complied with and their effectiveness.

The composition of the groups was broad with a public health focus and subgroups were initiated to meet separately and report to TAG. Resources were made available to support the administrative aspects of the groups.

7. Your views as to any lessons that can be learned from the Welsh Government's response to the Covid-19 pandemic, in particular relating to the work of the above-mentioned groups. Please describe any changes that have already been made, and set out any recommendations for further changes that you think the Inquiry should consider making.

A broad range of expertise with predominant public health focus was mobilized at pace in response to the pandemic reflecting the role of the TAG. It is always helpful to retain flexibility for individual level decision making for vulnerable groups such as immunodeficient patients.

8. A brief description of documentation relating to these matters that you hold (including soft copy material held electronically). Please retain all such material. I am not asking for you to provide us with this material at this stage, but I may request that you do so in due course.

Material relating to the collaborative scientific publications (above) is available should this be helpful.