



Sapna Pradip Sadarangani

Senior Consultant, NCID and Department of Infectious Diseases, TTSH

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Research Interests:

- Vaccine-preventable Diseases, particularly in the Elderly and Children
- Infections in the Elderly, Particularly Influenza
- Emerging Infectious Diseases
- Global Health and Travel Medicine
- Clinical Trials
- Sero-epidemiology
- Climate Change & Environmental Health

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Biography

Dr Sapna Sadarangani received her MBBS from the Yong Loo Lin school of Medicine, National University of Singapore. She completed her Internal Medicine-Pediatrics Residency training at the Western Michigan University, USA in 2012 being Chief Med-Peds resident from 2011-2012. Her Infectious Diseases Fellowship training was at the Mayo Clinic, Rochester, MN, USA in 2012-2015 where she won the Joseph Geraci Award in Infectious Diseases in 2015. She is board certified with ABIM for Internal Medicine and Infectious Diseases and with ABP for Paediatrics, and Fellow of the Academy of Medicine, Singapore. Dr. Sadarangani is an Infectious Diseases physician at NCID and completed her MSc in Public Health with the London School of Hygiene and Tropical Medicine with Distinction. Her interests are in vaccinology/vaccine-preventable diseases, global health, emerging infectious diseases, outbreak preparedness, tropical medicine, climate change, sustainable healthcare and environmental health.

Selected Publications

- Ng OT, Marimuthu K, Koh V, Pang J, Linn KZ, Sun J, De Wang L, Chia WN, Tiu C, Chan M, Ling LM, Vasoo S, Abdad MY, Chia PY, Lee TH, Lin RJ, Sadarangani SP, Chen MI, Said Z, Kurupatham L, Pung R, Wang LF, Cook AR, Leo YS, Lee VJ. SARS-CoV-2 seroprevalence and transmission risk factors among high-risk close contacts: a retrospective cohort study. *Lancet Infect Dis*. 2021 Mar;21(3):333-343. doi: 10.1016/S1473-3099(20)30833-1.
[https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30833-1/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30833-1/fulltext)
- Sadarangani SP, Young BE, Lian W, Phua HP, Chen MI, Barr I, Yeo TW, Dalan R, Chow A. DYNAMIC cohort study evaluating metabolic predictors of influenza vaccine immune response in older adults. *NPJ Vaccines*. 2022 Nov 1;7(1):135. doi: 10.1038/s41541-022-00548-z.
<https://www.nature.com/articles/s41541-022-00548-z>
- Mattar CN, Kalimuddin S, Sadarangani SP, Tagore S, Thain S, Thoon KC, Hong EY, Kanneganti A, Ku CW, Chan GM, Lee KZ, Yap JJ, Tan SS, Yan B, Young BE, Lye DC, Anderson DE, Yang L, Su LL, Somani J, Tan LK, Choolani MA, Chan JK. Pregnancy Outcomes in COVID-19: A Prospective Cohort Study in Singapore. *Ann Acad Med Singap*. 2020 Nov;49(11):857-869. doi: 10.47102/annals-acadmedsg.2020437. PMID: 33381779.
<https://pubmed.ncbi.nlm.nih.gov/33381779/>
- Sadarangani SP, Htun HL, Ling W, Hawkins R, Yeo TW, Rivino L, MacAry PA, Leo YS. Association of systemic vitamin D on the course of dengue virus infection in adults: a single-centre dengue cohort study at a large institution in Singapore. *Singapore Med J*. 2024 Jun 1;65(6):332-339. doi: 10.11622/smedj.2022064. Epub 2022 Jun 2.
<https://doi.org/10.11622/smedj.2022064>
- Zain A, Sadarangani SP, Shek LP, Vasoo S. Climate change and its impact on infectious diseases in Asia. *Singapore Med J*. 2024 Apr 1;65(4):211-219. doi: 10.4103/singaporemedj.SMJ-2023-180. Epub 2024 Apr 23. PMID: 38650059; PMCID: PMC11132621.
https://journals.lww.com/smj/fulltext/2024/04000/climate_change_and_its_impact_on_infectious.3.aspx
- Pathy LS, Tan WY, Clapham H, Sadarangani SP. The Application of Precision Public Health to Vaccinology. *World Scientific Annual Review of Vaccine Design*. 2024 Oct 4:2430001.
<https://www.worldscientific.com/doi/abs/10.1142/S2972428724300011>
- Poh XY, Lee IR, Tan CW, Chavatte JM, Fong SW, Goh YS, Rouers A, Wong N, Torres-Ruesta A, Mah SYY, Yeoh AYY, Gandhi M, Rahman N, Chin YQ, Lim JJ, Yoong TJK, Rao S, Chia PY, Ong SWX, Lee TH, Sadarangani SP, Lin RJH, Lim DRX, Chia W, Renia L, Ren EC, Lin RTP, Lye DC, Wang LF, Ng LFP, Young BE. First SARS-CoV-2 Omicron infection as an effective immune booster among mRNA

vaccinated individuals: final results from the first phase of the PRIBIVAC randomised clinical trial. EBioMedicine. 2024 Aug 12;107:105275. doi: 10.1016/j.ebiom.2024.105275.

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<https://doi.org/10.1016/j.vaccine.2024.126275>
- Bayrau BA, Buyukcangaz E, Sadarangani SP, Ondigo BN, Prinzi A, LaBeaud AD. (Un)Sustainable Science: Greening Practices in Research, Clinical Microbiology, and Veterinary Laboratories Locally and Globally. Open Forum Infect Dis. 2025 Jan 10;12(2):ofae677. doi: 10.1093/ofid/ofae677. PMID: 39958524; PMCID: PMC11825989.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC11825989/>
- Sutjipto S, Aung AH, Soon MML, Jing C, Ang BSP, Sadarangani SP, Chong KW, Ng OT, Marimuthu K, Lim WY, Chow A, Vasoo S. Plastic Waste and COVID-19 Incidence Among Hospital Staff After Deescalation in PPE Use. JAMA Netw Open. 2025 Apr 1;8(4):e255264. doi: 10.1001/jamanetworkopen.2025.5264. PMID: 40232716.
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2832735>

Notable Research/Innovation Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
Clinician Scientist Salary Support programme (CSSSP) Probing the Immunometabolic Factors of Influenza Vaccine Immune Response in Singapore Elderly	2020
RIE2020 Collaborative CG Seed Funding A seroepidemiology study of healthcare workers and employees during the 2019-nCoV (COVID 19) outbreak at the National Centre for Infectious Diseases, Singapore	2020

Translating Research/Innovation Into Healthcare

2025:

- Global Outbreak Alert and Response Network partners surge in response to disease outbreaks in the Western Pacific Region. WHO is leveraging its GOARN partners in the Western Pacific Region to enable surge deployment in response to increasing measles cases in Mongolia and Viet Nam, as well as an HIV outbreak in Fiji.
[WHO's Operational Update on Health Emergencies - May 2025](#) (Page 8), published 2 May 2025

2024:

- 调查：低维他命D者若感染骨痛热症 出现重症几率较高 (Investigation: Low vitamin D individuals are more susceptible to severe symptoms when infected with dengue). Published 7 June 2024.
[8world.com/singapore/dengue-and-vitamin-d-2477596](https://www.8world.com/singapore/dengue-and-vitamin-d-2477596)
- 本地医学研究骨痛热重症者或与维生素D低有关 (Local research shows that severe cases of dengue fever may be related to low vitamin D). Published 17 June 2024.
- Mongolia's measles response: a swift and proactive approach deploying experts from the Global Outbreak Alert and Response Network. Published 12 December 2024
<https://www.who.int/westernpacific/newsroom/feature-stories/item/mongolias-measles-response-a-swift-and-proactive-approach-deploying-experts-from-the-global-outbreak-alert-and-response-network>

2022:

- Move to let patients get flu, pneumococcal jabs at their designated TTSH specialist outpatient clinic. Published 16 Dec 2022.
<https://www.straitstimes.com/singapore/health/more-patients-can-get-flu-pneumococcal-jabs-at-their-designated-ttsh-specialist-outpatient-clinic>
- "TTSH expands scheme for seniors to receive their influenza and pneumococcal vaccine 陈笃生医院明年起扩大两疫苗项目年长者复诊时可接种流感肺炎疫苗" Published on 16 Dec 2022.
<https://www.zaobao.com.sg/news/singapore/story20221216-1343936>
- TTSH expands scheme for seniors to get flu vaccines without booking or prescription in bid to drive take-up. Published on 17 Dec 2022.
<https://www.todayonline.com/singapore/flu-vaccines-seniors-ttsh-expands-pilot-more-clinics-patients-2072546>