

Sapna Pradip Sadarangani



Senior Consultant, NCID and Department of Infectious Diseases, TTSH
Assistant Professor, Lee Kong Chian School of Medicine, NTU
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Research/Innovation Interests:

- Vaccinology and Vaccine-preventable Diseases, particularly in Older Adults and Children
- 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, 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>
- Poh XY, Tan CW, Lee IR, Chavatte JM, Fong SW, Prince T, Hartley C, Yeoh AYY, Rao S, Chia PY, Ong SWX, Lee TH, Sadarangani SP, Lin RJH, Lim C, Teo J, Lim DRX, Chia W, Hiscox JA, Ng LFP, Ren EC, Lin RTP, Renia L, Lye DC, Wang LF, Young BE. Antibody Response of Heterologous vs Homologous Messenger RNA Vaccine Boosters Against the Severe Acute Respiratory Syndrome Coronavirus 2 Omicron Variant: Interim Results from the PRIBIVAC Study, a Randomized Clinical Trial. *Clin Infect Dis*. 2022 Dec 19;75(12):2088-2096. doi: 10.1093/cid/ciac345
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- Ong SWX, Vasoo S, Sadarangani SP, Cui L, Marimuthu K, Lim PL, Kong JW, Wong JCC, Puong KY, Chan KP. Vaccine-associated Rubella - a report of two cases and a review of the literature. *Hum Vaccin Immunother*. 2021 Jan 2;17(1):224-227. doi: 10.1080/21645515.2020.1765623
<https://www.tandfonline.com/doi/full/10.1080/21645515.2020.1765623>
- Chan LG, Tan PLL, Sim K, Tan MY, Goh KH, Su PQ, Tan AKH, Lee ES, Tan SY, Lim WP, Aw CH, Goh YZ, Sadarangani S, Chow A. Psychological impact of repeated epidemic exposure on healthcare workers: findings from an online survey of a healthcare workforce exposed to both SARS (severe acute respiratory syndrome) and COVID-19. *BMJ Open*. 2021 Nov 30;11(11):e051895. doi: 10.1136/bmjopen-2021-051895. PMID: 34848518; PMCID: PMC8635888.
<https://bmjopen.bmj.com/content/11/11/e051895>
- Young BE, Mak TM, Ang LW, Sadarangani S, Ho HJ, Wilder-Smith A, Barkham T, Chen M. Influenza vaccine failure in the tropics: a retrospective cohort study of waning effectiveness. *Epidemiol Infect*. 2020 Dec 2;148:e299. doi: 10.1017/S0950268820002952. PMID: 33261680; PMCID: PMC7801929.
<https://www.cambridge.org/core/journals/epidemiology-and-infection/article/influenza-vaccine-failure-in-the-tropics-a-retrospective-cohort-study-of-waning-effectiveness/87A2CBE95B761D59902B68BC0BDFC65D>
- 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/>
- American Society of Tropical Medicine and Hygiene (ASTMH) Green Task Force members; Dumre SP, LaBeaud AD, Ehrlich H, Vazquez Guillamet LJ, Ondigo BN, Sadarangani SP, Wamae CN, Whitfield K. Why Climate Action Is Global Health Action. *Am J Trop Med Hyg*. 2022 Jul 18;107(3):500–3. doi: 10.4269/ajtmh.22-0189. Epub ahead of print. PMID: 35895350; PMCID: PMC9490666.
<https://www.ajtmh.org/view/journals/tpmd/107/3/article-p500.xml>
- 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

- Ng DHL, Chia TRT, Young BE, Sadarangani S, Puah SH, Low JGH, Yan GZ, Mo Y, Ngiam NJ, Wang SSY, Loo YT, Ong FEJQ, Li AY, Ho S, Ng L, Tambyah PA, Yeo TW. Study protocol: infectious diseases consortium (I3D) for study on integrated and innovative approaches for management of respiratory infections: respiratory infections research and outcome study (RESPIRO). BMC Infect Dis. 2024 Jan 23;24(1):123. doi: 10.1186/s12879-023-08795-8.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10807062/>

Notable Research/Innovation Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
NMRC Clinician Scientist – Individual Research Grant New Investigator Grant (CS-IRG) Probing the Immunometabolic Factors of Influenza Vaccine Immune Response in Singapore Elderly	2019
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

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>