

Personal Details

Name Dr Aishwarya Venkataraman
Designation Scientist E (Medical - Paediatrics)
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Academic Qualifications

2021	Fellow of the Royal College of Paediatrics and Child Health (FRCPCH)	Royal College of Paediatrics and Child Health, UK
2015	Post graduate Diploma in Paediatric infectious diseases	University of Oxford, UK
2010	Member of the Royal College of Paediatrics and Child Health (MRCPCH)	Royal College of Paediatrics and Child Health, UK
2007	Diploma of child health (DCH)	Royal College of Paediatrics and Child Health, UK
2003	M.B.B.S	Rajiv Gandhi University of Health Sciences, India

Current Appointment

May 2021 – present	Scientist E (Medical), Clinical Research/Paediatrics, ICMR-NIRT
Aug 2019 – present	DBT Ramalingaswami Fellow, ICMR-NIRT

Previous Appointments

Aug 2017 – July 2020	Honorary/Locum Senior Clinical fellow (ST4+) Paediatrics. Great Ormond Street Hospital, London
Mar 2011 – Aug 2017	Senior Clinical fellow (ST4+) Great Ormond Street Hospital, London (Infectious diseases, Immunology, Haematology/Oncology, Bone marrow transplant and General Paediatrics)
Sep 2009 – Feb 2010	ST4 Neonatology, Watford General Hospital, Watford
Sep 2008 – Sep 2009	ST3 Paediatrics and Paediatric A&E, Watford General Hospital, Watford
Aug 2007 – Aug 2008	ST2 Paediatrics and Neonatology, Luton and Dunstable Hospital, Luton
Feb 2007 – July 2007	Senior house officer Paediatrics, Royal Shrewsbury Hospital, Shrewsbury
Feb 2006 – Feb 2007	SHO Neonatology, James Cook University Hospital, Middlesbrough Birmingham Women's Hospital, Birmingham
Aug 2005 – Feb 2006	Senior SHO Paediatrics and Neonatology, Daisy Hill Hospital, Newry
April 2005 – Aug 2005	Locum senior house officer Paediatrics, King George Hospital, Ilford
May 2003 – Aug 2004	Registrar (Resident) Paediatrics, SKKS Hospital, Chennai
Sep 2002 – May 2003	Medical officer, Paediatrics Meenakshi Mission Hospital, India
Aug 2001 – Sep 2002	Pre-registration house officer, MMHRC, Madurai, India

Professional Societies and Memberships

Medical Council of India (TNMC number: 71087)
General medical council. Reg No.: 6094536
Royal College of Paediatrics and Child Health (RCPCH)
European Society of Paediatric Infectious Diseases (ESPID)
British Paediatric Allergy, Immunology and Infectious Diseases Group (BPAIIG)
Royal Society of Tropical Medicine and Hygiene (RSTMH)
British Infection Association (BIA)
International Child Health Group, RCPCH
Ptbnet (paediatric branch of the TBnet)

Research specialization (Major scientific fields of interest)

Paediatric Tuberculosis and immunology, Malnutrition, Vaccine

Current Research Grant as PI - ongoing

1. "Impact of malnutrition on immune responses to tuberculosis in Indian Children".
DBT Ramalingaswami Re-entry Fellowship (2/8/2019 – 1/8/2024)
2. "A longitudinal observational study on the impact of SARS-CoV-2 infection on TB disease and treatment outcome in children" NIH-NIRT-ICER intramural funds (Jan 2022 – Jan 2024)

Previous Research/Studies as PI

1. "Serial inflammatory responses in children receiving different treatment regimen for Multisystem Inflammatory Syndrome (MIS-C) - Longitudinal observational study from Southern India" NIRT Intramural funds
2. "Sero-prevalence and Clinical profile of SARS-CoV-2 infection in children". CTMRF Intramural fund
3. "Role of neutralizing antibodies and inflammatory biomarkers in children with PIMS-TS" NIH-NIRT-ICER intramural funds
4. An observational study of clinical and immunological features of children with SARS-COV-2 (COVID19) infection over a period of 12 to 16 weeks" NIH-NIRT-ICER intramural funds.
5. "Management and Outcome of Bacille Calmette-Guérin Vaccine Adverse Reactions" Place: The Royal London Hospital, London, UK
6. "Management and Outcome of CNS TB in Children – 18 years survey" Place: Great Ormond Street Hospital, London, UK
7. "Concurrent Meningitis in Infants with Bronchiolitis". Place: The Royal London Hospital, London, UK

Invited speaker/oral presentations (Recent)

1. Aug 2020 (Webinar) Antibody testing in COVID 19
Kanchi Kamakoti CHILDS Trust Hospital, Chennai
2. June 2022 Immunopathogenesis of MIS-C – findings from southern India
International Kawasaki Disease Registry – Montreal meeting
3. November 2022 BCG Revaccination
24 National Conference of Pediatric Infectious Diseases, Vellore
4. December 2022 Immunological Response in MIS-C with Cardiovascular abnormalities
Heightened complement activation is associated with MIS-C and acute COVID-19 in children
Department of Public Health International conference, Chennai

5. August 2023 Vaccines in TB
Platform for Research Excellence Related to National Aims
6. December 2023 Haemoglobin and red cell indices in children with TB
NAPCON, Hyderabad
7. December 2023 Impact of Malnutrition on immune responses to TB in children
Graduate study day, QMUL, London, UK

Recent Peer Reviewed Publications

1. Evaluation of platelet indices as markers of tuberculosis among children in India, ERJOpen – in Press
2. Rajamanickam, A., Kumar, N.P., **Venkataraman, A.** et al. Sex-specific differences in systemic immune responses in MIS-C children. *Sci Rep* 14, 1720 (2024).
3. Khoury M, Harahsheh AS, Raghuv eer G, Dahdah N, Lee S, Fabi M, Tierney ES, Portman MA, Choueiter NF, **Venkataraman, A**Elias M, Thacker D. Obesity and Outcomes of Kawasaki Disease and COVID-19–Related Multisystem Inflammatory Syndrome in Children. *JAMA network open*. 2023 Dec 1;6(12):e2346829-.
4. Kumar NP, **Venkataraman A***, Nancy A, Selvaraj N, Moideen K, Ahamed SF, Renji RM, Sasidaran K, Kumar S, Periyakuppan M, Sangaralingam T. Immune Profiles in Multisystem Inflammatory Syndrome in Children with Cardiovascular Abnormalities. *Viruses*. 2023 Oct 27;15(11):2162.
5. Harahsheh AS, Shah S, Dallaire F, Manlhiot C, Khoury M, Lee S, Fabi M, Mauriello D, Tierney ES, **Venkataraman A** Sabati AA, Dionne A. Kawasaki Disease in the Time of COVID-19 and MIS-C: The International Kawasaki Disease Registry. *Canadian Journal of Cardiology*. 2023 Jun 7.
6. Portman MA, Harahsheh AS, Raghuv eer G, Sundraram B, **Venkataraman A**, Yamazaki-Naksahimada M, Park S, El Ganzoury M, Dionne A, Thacker D, Chang AJ. Pattern of Use of Anakinra for Patients With Kawasaki Disease versus Multisystem Inflammatory Syndrome in Children Associated With COVID-19. *Circulation*. 2023 Nov 7;148(Suppl_1):A15506-.
7. Balasubramanian S, **Venkataraman A**, Ramanan AV. Pediatric COVID-19 and MIS-C - Lessons Learnt and the Way Forward. *Indian Pediatrics*. 2023;60(5):347-349.
8. Rajamanickam, A., **Venkataraman A***, Kumar, N.P. et al. Alterations of adipokines, pancreatic hormones and incretins in acute and convalescent COVID-19 children. *BMC Pediatrics* 23, 156 (2023).
9. Kumar NP, Abbas KM, Renji RM, **Venkataraman A**, Nancy A, Varadarjan P, Selladurai E, Sangaralingam T, Selvam R, Thimmaiah A, Natarajan S. Multisystem inflammatory syndrome in children characterized by enhanced antigen-specific T-cell expression of cytokines and its reversal following recovery. *Frontiers in Pediatrics*. 2023;11.
10. Rajamanickam A, Nathella PK, **Venkataraman A***, et al. Levels of Complement Components in Children With Acute COVID-19 or Multisystem Inflammatory Syndrome. *JAMA Open Network*. 2023;6(3):e231713.
11. **Venkataraman A***, Pavan Kumar N, Varadarjan P, Nancy A, Rajamanickam A, Selladurai E, Sankaralingam T, Thiruvengadam K, Selvam R, Thimmaiah A, Natarajan S, Ramaswamy G, Putlibai S, Sadasivam K, Sundaram B, Hissar S, Ranganathan UD, Nutman TB and Babu S (2022) Role of matrix metalloproteinases in multi-system inflammatory syndrome and acute COVID-19 in children. *Frontiers in Medicine*. 2022;9:1050804.

12. **Venkataraman A**, Shanmugam S, Balaji S, Mani K, Shanmugavel AK, Muthuramalingam K, Hissar S, Thiruvengadam K, Selladurai E, Smuk M, Hanna LE. Comparison of two mycobacterial strains in performance of the whole blood mycobacterial growth inhibition assay in Indian children. *Tuberculosis*. 2022 Dec 1;137:102255.
13. Rajamanickam A, Nathella PK, **Venkataraman A***, Varadarajan P, Kannan S, Pandiarajan AN, Renji RM, Elavarasan E, Thimmaiah A, Sasidaran K, Krishnamoorthy N. Unique cellular immune signatures of multisystem inflammatory syndrome in children. *PLoS pathogens*. 2022 Nov 2;18(11):e1010915.
14. Khoury M, **Venkataraman A**, Portman MA, Fabi M, Dahdah N, Jain S, Jone PN, Raghuv eer G, Lee S, Prasad D, El Ganzoury M. Association of Increased Adiposity and Presentation and Outcomes for Kawasaki Disease versus Multisystem Inflammatory Syndrome in Children Associated With Covid-19. *Circulation*. 2022 Nov 8;146(Suppl_1):A11816-.
15. Kumar NP, **Venkataraman A**, Arul N, Moiden K, Vardarajan P, Elilarasi S, Thangavelu S, Selav R, Thimmiah A, Suresh N, Ganesh R, Hissar S, Uma Devi K R, Babu S. Enhanced SARS-CoV-2 antigen specific systemic immune responses in Multi-system Inflammatory Syndrome in Children and reversal after recovery. *The Journal of Infectious Diseases* 2022 Oct 1;226(7):1215-23.
16. **Venkataraman A***, Kumar NP, Hanna LE, Putlibai S, Karthick M, Rajamanikam A, Sadasivam K, Sundaram B, Babu S. Systemic inflammation and microbial translocation are characteristic features of SARS-CoV2 related Multi-system Inflammatory Syndrome in Children. *Open Forum Infectious Diseases Journal*. 2021 Jul 6;8(7):ofab279.
17. **Venkataraman A**, Kumar NP, Hanna LE, Putlibai S, Karthick M, Rajamanikam A, Sadasivam K, Sundaram B, Babu S. Plasma biomarker profiling of PIMS-TS, COVID-19 and SARS-CoV2 seropositive children – a cross-sectional observational study from southern India. *EBioMedicine*. 2021 Apr 1;66:103317
18. **Venkataraman A**, Balasubramanian S, Putilibai S, Amperayani S, Senthilnathan S, Manoharan A, Sophi A, Amutha R, Sadasivam K, Goenka A, Ramanan AV. Correlation of SARS-CoV-2 serology and clinical phenotype amongst hospitalised children in a tertiary children's hospital in India. *Journal of tropical pediatrics*, 2021 Feb; 67(1), fmab015.
19. K Dhanalakshmi, **Venkataraman A***, S Balasubramanian, M Madhusudan, S Amperayani, S Putilibai, K Sadasivam, B Ramachandran & AV Ramanan. Epidemiological and clinical profile of PIMS-TS in Indian children – An observational study *Indian Pediatrics* 2020 Nov;57(11):1010-4
20. **Venkataraman A**, Yusuff M, Liebeschuetz S, Riddell A, & Prendergast A. J. Management and outcome of Bacille Calmette-Guérin vaccine adverse reactions. *Vaccine* 33.41 (2015): 5470-5474.
21. **Venkataraman A**, Siu E, Sadasivam K. Paediatric electronic infusion calculator: an intervention to eliminate infusion errors in paediatric critical care. *Journal of the Intensive Care Society* 17.4 (2016): 290–294
22. Avanis M C, **Venkataraman A***, Vaidya M, & Sadasivam K. Pediatric Resuscitation: Do We Maintain Adequate Skills? *Pediatric emergency care* 32.3 (2016): 195-196

**Shared first authorship*

Book chapter

S.No	Title	Author's Name	Publisher	Year of Publication
1	"Neutrophil disorder" Immunology, IJPP Series	Nancy Hilda J, Aishwarya Venkataraman	Indian Journal of Practical Paediatrics	2021;23(2):107 Vol.23 No.2;, 2021

Conference abstracts

1. **Aishwarya Venkataraman.** Impact of malnutrition on immune responses to tuberculosis in Indian Children. DBT RRF and MK Bhan YRF joint conclave, Thriuvanthapuram, India 2022 (Poster presentation)
2. **Aishwarya Venkataraman,** Shivakumar Shanmugam, Sarath Balaji, Karthick Mani, Ashok Kumar Shanmugavel, Kannan Muthuramalingam, Syed Hissar, Elilarasi S, Melanie Smuk, Helen Fletcher, Luke Elizabeth Hanna, Andrew J Prendergast. Comparison of two mycobacterial strains in performance of the whole blood mycobacterial growth inhibition assay in Indian children. 76th National conference for TB and chest diseases, Ambala, India 2022 (Poster presentation)
3. Syed Hissar, Kannan M, **Venkataraman A,** T Kannan, NS Gomathi, Anbalagan S, Annie Studhi, Luke Hanna, Bhanurekha V, S Swaminathan. Haematological profile and the ratio of monocytes to lymphocytes in children with tuberculosis 50th Union World Conference on Lung Health, Hyderabad, 2020 (Poster presentation)
4. Syed Hissar, VV Banurekha, T Kannan, **Venkataraman A,** PK Bhavani, NS Gomathi, Ezhilarasi, S Swaminathan. Nutrition status in intra-thoracic tuberculosis disease and TB infection in children: an observational study from South India. 49th Union World Conference on Lung Health, Netherlands, 2019 (Poster presentation)
5. **Venkataraman A,** Conn R, Cotton RL, Abraham S, Banaghan M, Callaghan B. Enhancing Situational Awareness Through Safety Huddles – A Staff Perspective GOSH Inaugural Conference – Advances in Paediatrics 2017 (Poster presentation)
6. **Venkataraman A,** Sadasivam K. Concurrent meningitis in bronchiolitis 35th Annual Meeting of the ESPID 2017 (Poster presentation)