

Scientist Profile			
Name		Dr Dina Nair	
Designation		Scientist E (Medical)	
Date of Birth		11 June 1973	
Date of Joining		15 Nov 2007	
Date of joining present post		01 September 2022	
Discipline		Clinical Research	
Address (off.) including Contact Number*		ICMR - National Institute for Research in Tuberculosis (ICMR-NIRT) No.1, Mayor Sathyamoorthy Road, Chetpet, Chennai - 600031 Ph: 044-28369500,044-28369543 Mobile no. 9962044855	
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Educational Qualifications (begin with descending order)			
DEGREE	INSTITUTION AND LOCATION	YEAR(s)	FIELD OF STUDY
Master of Public Health in Epidemiology and Health systems (MPH)	ICMR-National Institute of Epidemiology (NIE), Chennai	2019-2021	Public Health
Professional Diploma in Clinical Research	Catalyst Clinical Services	2010	Clinical Research
PG Diploma Public Health	Annamalai University, Tamil Nadu ,India	2009	Public Health
MBBS	Government Medical College, Thiruvananthapuram,	1995	Medicine, Surgery
Research Experience			
Grade/Post & duties assigned to the post	From -To		Inst./Centre.Hqrs
Scientist 'E'(Medical)	01.09.2022-Till date		ICMR-NIRT
Scientist 'D'(Medical)	01.09.2018-31.08.2022		ICMR-NIRT
Scientist 'C'(Medical)	06.01.2014-31.08.2018		ICMR-NIRT
Senior Research Fellow (Medical)	01.02.2011-30.11.2013		ICMR-ICER-NIRT
Senior Research Fellow (Medical)	15.11.2007-14.11.2010		ICMR-NIRT
Membership/Fellowship of Professional Societies/Associations: Nil		Member of Epidemiology Foundation of India	
Workshops/Conferences/Symposiums:		20	
Publications:		50	
<ol style="list-style-type: none"> 1) Thomas A, Joseph P, Nair D, Rao DVB, Rekha VVB, Selvakumar N, et al. Extensively drug-resistant tuberculosis: Experience at the Tuberculosis Research Centre, Chennai, India. Int J Tuberc Lung Dis. 2011;15(10):1323-5. 2) Kumar NP, Sridhar R, Banurekha V V, Nair D, Jawahar MS, Nutman TB, et al. Expansion of pathogen-specific mono- and multifunctional Th1 and Th17 cells in multi-focal tuberculous lymphadenitis. PLoS One. 2013;8(2):e57123. 3) Mathew G, Babu N, Joseph R, Basheer S, George S, Jayakrishna V, Dina Nair. Ubiquitous creation of electronic medical record and clinical data management using tablet PC. 2013;4(8):4-9. 			

- 4) **Nair D**, Swaminathan S. Prevention of TB in the presence of coinfection and comorbid conditions. *Clin Insights Tuberc Prev* [Internet]. 2014;91-111. Available from: <http://www.futuremedicine.com/doi/abs/10.2217/ebo.13.551>.
- 5) George PJ, Kumar NP, Sridhar R, Hanna LE, **Nair D**, Banurekha V V, et al. Coincident helminth infection modulates systemic inflammation and immune activation in active pulmonary tuberculosis. *PLoS Negl Trop Dis*. 2014;8(11):e3289.
- 6) Velayutham BRV, **Nair D**, Chandrasekaran V, Raman B, Sekar G, Watson B, et al. Profile and response to anti-tuberculosis treatment among elderly tuberculosis patients treated under the TB Control programme in South India. *PLoS One*. 2014;9(3):1-8.
- 7) Kumar NP, Banurekha V V, **Nair D**, Sridhar R, Kornfeld H, Nutman TB, et al. Coincident pre-diabetes is associated with dysregulated cytokine responses in pulmonary tuberculosis. *PLoS One*. 2014;9(11):e112108.
- 8) Velayutham B V, Allaudeen IS, Sivaramakrishnan GN, Perumal V, **Nair D**, Chinnaiyan P, et al. Sputum Culture Conversion with Moxifloxacin Containing Regimens in the Treatment of New Sputum Positive Pulmonary Tuberculosis Patients in South India. *Clin Infect Dis*. 2014;59:1-22.
- 9) Diacon AH, Pym A, Grobusch MP, de Los Rios JM, Gotuzzo E, Vasilyeva I, et al. Multidrug-Resistant Tuberculosis and Culture Conversion with Bedaquiline. *N Engl J Med* [Internet]. 2014;371(8):723-32.
- 10) George PJ, Pavan Kumar N, Jaganathan J, Dolla C, Kumaran P, **Nair D**, Banurekha V V, Kui Shen, Thomas B Nutman; Subash Babu. Modulation of pro- and anti-inflammatory cytokines in active and latent tuberculosis by coexistent *Strongyloides stercoralis* infection. *Tuberculosis* 2015; 95(6):822-8.
- 11) Kumar NP, Sridhar R, **Nair D**, Banurekha V V, Nutman TB, Babu S. Type 2 diabetes mellitus is associated with altered CD8 (+) T and natural killer cell function in pulmonary tuberculosis. *Immunology*. 2015; 144(4):677-86.
- 12) Kumar NP, Moideen K, Banurekha V V, **Nair D**, Sridhar R, Nutman TB, et al. IL-27 and TGF β mediated expansion of Th1 and adaptive regulatory T cells expressing IL-10 correlates with bacterial burden and disease severity in pulmonary tuberculosis. *Immunity, Inflamm Dis*. 2015; 3(3): 289-299.
- 13) Kumar NP, Banurekha V V, **Nair D**, Kumaran P, Dolla CK, Babu S. Type 2 diabetes - Tuberculosis co-morbidity is associated with diminished circulating levels of IL-20 subfamily of cytokines. *Tuberculosis* 2015; 95(6):707-12.
- 14) Velayutham B, Thomas B, **Nair D**, Thiruvengadam K, Prashant S, Kittusami S, et al. The Usefulness and Feasibility of Mobile Interface in Tuberculosis Notification (MITUN) Voice Based System for Notification of Tuberculosis by Private Medical Practitioners - A Pilot Project. *PLoS One* 2015; 10(9):e0138274.
- 15) Kumar NP, Moideen K, Dhakshinraj SD, Banurekha V V, **Nair D**, Dolla C, et al. Profiling leucocyte subsets in tuberculosis-diabetes co-morbidity. *Immunology* 2015; 146: 243-250.
- 16) Velayutham B, **Nair D**, Ramalingam S, Becerra MC, Swaminathan S. Setting priorities for a research agenda to combat drug-resistant tuberculosis in children. *PHA* 2015; 5(4): 222-235.
- 17) Kumar NP, Banurekha V V., **Nair D**, Babu S. Circulating angiogenic factors as biomarkers of disease severity and bacterial burden in pulmonary tuberculosis. *PLoS One*. 2016;11(1):1-12.
- 18) Thomas BE, Velayutham B, Thiruvengadam K, **Nair D**, Barman SB, Jayabal L, et al. Perceptions of private medical practitioners on tuberculosis notification: A study from Chennai, South India. *PLoS One*. 2016; 11(1):1-9.
- 19) Pavan Kumar N, **Nair D**, Banurekha VV, Dolla C, Kumaran P, Sridhar R, Babu S. Type 2 diabetes mellitus coincident with pulmonary or latent tuberculosis results in modulation of adipocytokines. *Cytokine*. 2016 Mar; 79:74-81.

- 20) **Nair D**, Rajshekhar N, Klinton JS, Watson B, Velayutham B, Tripathy JP, et al. (2016) Household Contact Screening and Yield of Tuberculosis Cases –A Clinic Based Study in Chennai, South India. PLoS ONE11 (9):e0162090.
- 21) **Nair D**, Navneethapandian PD, Tripathy JP, Harries AD, Klinton JS, Watson B, et al. Impact of rapid molecular diagnostic tests on time to treatment initiation and outcomes in patients with multidrug-resistant tuberculosis, Tamil Nadu, India. Trans R Soc Trop Med Hyg 2016; 110: 534-541.
- 22) B. Velayutham, **D. Nair**, T. Kannan, C. Padmapriyadarsini, K. S. Sachdeva, J. Bency, et al. Factors associated with sputum culture conversion in Multidrug resistant pulmonary tuberculosis. Int J Tuberc Lung Dis.2016; 20(12):1671-1676.
- 23) Padmapriyadarsini C, **Nair D**, Gomathi NS, Velayudham B. Pulmonary Mycobacterium kansasii disease in immunocompetent host: Treatment outcomes with short-course chemotherapy. Indian J Med Microbiol 2016; 34:516-9.
- 24) Kumar N. P, Velayutham B, **Nair D**, Babu S. Angiopoietins as biomarkers of disease severity and bacterial burden in pulmonary tuberculosis. Int J Tuberc Lung Dis. 2017;21(1):93-99.
- 25) Kathamuthu GR, Moideen K, Baskaran D, Banurekha VV, **Nair D**, Sekar G, Sridhar R, Vidyajayanthi B, Gajendraraj G, Parandhaman DK, Srinivasan A, Babu S. 2017. Tuberculous lymphadenitis is associated with enhanced baseline and antigen-specific induction of type 1 and type 17 cytokines and reduced interleukin-1B (IL-1B) and IL-18 at the site of infection. Clin Vaccine Immunol 24: e00045-17.
- 26) **D Nair**, B Velayutham, K Thiruvengadam, JP Tripathy, AD Harries, KS Sachdeva, M Natrajan, S Swaminathan. Predictors of unfavourable treatment outcome in patients with multidrug-resistant tuberculosis in India. PHA 2017; 7(1): 32-38.
- 27) Kumar NP, BanurekhaVV, **Nair D**, Babu S. Diminished plasma levels of common γ chain cytokines in pulmonary tuberculosis and reversal following treatment. PLoS ONE 12(4) (2017): e0176495.
- 28) Shewade H.D, **Nair D**, Klinton J.S, Parmar M, Lavanya J, Murali L, Gupta V, Tripathy J.P, Swaminathan S, Kumar A.M.V. Low pre-diagnosis attrition but high pre-treatment attrition among patients with MDR-TB: Operational research from Chennai, India. J Epidemiol Global Health 2017; 7(4): Pages 227-233.
- 29) Nakatani Y, Opel-Reading HK, Merker M, Machado D, AndresS, Kumar SS, Moradigaravand D, Coll F, Perdigão J, Portugal I, Schön T, **Nair D**, Devi KR U, Kohl TA, Beckert P, Clark TG, Maphalala G, Khumalo D, Diel R, Klaos K, Aung HL, Cook GM, Parkhill J, Peacock S J, Swaminathan S, Viveiros M, Niemann S, Krause KL, Köser CU. Role of alanine racemase mutations in Mycobacterium tuberculosis D cycloserine resistance. Antimicrob Agents Chemother.2017 1:e 01575-17.
- 30) Kumar NP, Banurekha V V, **Nair D**, Dolla CK, Kumaran P, Babu S. Modulation of iron status biomarkers in tuberculosis-diabetes co-morbidity. Tuberculosis 2018; 108(1):127-135.
- 31) Kumar NP, Moideen K, Banurekha V V, **Nair D**, Babu S. Modulation Of Th1/Tc1 And Th17/Tc17 Responses In Pulmonary Tuberculosis By IL-20 Subfamily Of Cytokines - Submitted to frontiers in Cellular and Infection Microbiology
- 32) Kathamuthu GR, Moideen K, Banurekha VV, **Nair D**, Sridhar R, Baskaran D, Babu S. Altered circulating levels of B cell growth factors and their modulation upon anti-tuberculosis treatment in pulmonary tuberculosis and tuberculous lymphadenitis. PLoS One. 2018 Nov 14;13(11): e0207404.
- 33) **Nair D**, Velayutham B, Marimuthu M, Navaneethapandian PG, Chinnaiyan P, Jawahar MS, Swaminathan S. Effect of moxifloxacin on QTc interval in adults with pulmonary tuberculosis. Natl Med J India 2018; 31:58-9.
- 34) Moideen K, Kumar NP, **Nair D**, Banurekha VV, Babu S. Altered Systemic Adipokine Levels in Pulmonary Tuberculosis and Changes following Treatment. Am J Trop Med Hyg. 2018 Oct;99(4):875-880.

- 35) Kumar NP, Moideen K, Banurekha VV, **Nair D**, Babu S. Modulation of Th1/Tc1 and Th17/Tc17 responses in pulmonary tuberculosis by IL-20 subfamily of cytokines. *Cytokine*. 2018 Aug; 108:190-196.
- 36) Kumar NP, Banurekha VV, **Nair D**, Dolla C, Kumaran P, Babu S. Modulation of iron status biomarkers in tuberculosis-diabetes co-morbidity. *Tuberculosis*. 2018 Jan 1; 108:127-35.
- 37) Shanmugam S, Kumar N, **Nair D**, Natrajan M, Tripathy SP, Peacock SJ, Swaminathan S, Ranganathan UD. Genome Sequencing of Polydrug, Multidrug-, and Extensively Drug-Resistant Mycobacterium tuberculosis Strains from South India. *Microbiol Resour Announc*. 2019 Mar 21;8(12):e01388-18.
- 38) Munir A, Kumar N, Ramalingam SB, Tamilzhalagan S, Shanmugam SK, Palaniappan AN, **Nair D**, Priyadarshini P, Natarajan M, Tripathy S, Ranganathan UD. Identification and characterization of genetic determinants of isoniazid and rifampicin resistance in Mycobacterium tuberculosis in southern India. *Scientific reports*. 2019 Jul 16;9(1):1-3.
- 39) Kumar NP, Moideen K, Banurekha VV, **Nair D**, Babu S. Plasma Proinflammatory Cytokines Are Markers of Disease Severity and Bacterial Burden in Pulmonary Tuberculosis. *Open Forum Infect Dis*. 2019;6(7)
- 40) Kathamuthu GR, Munisankar S, Banurekha VV, **Nair D**, Sridhar R, Babu S. Filarial Coinfection Is Associated with Higher Bacterial Burdens and Altered Plasma Cytokine and Chemokine Responses in Tuberculous Lymphadenitis. *Frontiers in Immunology*. 2020:706.
- 41) Kathamuthu GR, Kumar NP, Moideen K, **Nair D**, Banurekha VV, Sridhar R, Baskaran D, Babu S. Matrix metalloproteinases and tissue inhibitors of metalloproteinases are potential biomarkers of pulmonary and extra-pulmonary tuberculosis. *Frontiers in Immunology*. 2020 Mar 11; 11:419.
- 42) Moideen K, Kumar NP, Bethunaickan R, Banurekha VV, **Nair D**, Babu S. Heightened systemic levels of anti-inflammatory cytokines in pulmonary tuberculosis and alterations following anti-tuberculosis treatment. *Cytokine*. 2020 Mar 1; 127:154929.
- 43) Kumar NP, Kathamuthu GR, Moideen K, Banurekha VV, **Nair D**, Fay MP, Nutman TB, Babu S. Strongyloides stercoralis coinfection is associated with greater disease severity, higher bacterial burden, and elevated plasma matrix metalloproteinases in pulmonary tuberculosis. *The Journal of Infectious Diseases*. 2020 Aug 17;222(6):1021-6.
- 44) Velayutham B, Jayabal L, Watson B, Jagadeesan S, Angamuthu D, Rebecca P, Devaleenal B, **Nair D**, Tripathy S, Selvaraju S. (2020) Tuberculosis screening in household contacts of pulmonary tuberculosis patients in an urban setting. *PLoS ONE* 15(10): e02405
- 45) Padmapriyadarsini C, Sachdeva KS, **Nair D**, Ramachandran R. The paradigm shift in the approach to management of latent tuberculosis infection in high tuberculosis burden countries. *Expert Review of Respiratory Medicine*. 2021 Jul 3;15(7):899-910.
- 46) Kumar NP, Moideen K, Nancy A, Viswanathan V, Thiruvengadam K, Sivakumar S, Hissar S, **Nair D**, Banurekha VV, Kornfeld H, Babu S. Association of plasma matrix metalloproteinase and tissue inhibitors of matrix metalloproteinase levels with adverse treatment outcomes among patients with pulmonary tuberculosis. *JAMA network open*. 2020 Dec 1;3(12): e2027754.
- 47) Hemanth KA, Natarajan PL, Kannan T, Sridhar R, Kumar S, Vinod KV, Gomathi NS, Bharathiraja T, Sudha V, Balaji S, Rameshkumar S, **Dina N**, Tripathy SP, Geetha R. Pharmacokinetics of anti-tuberculosis drugs in multidrug resistant tuberculosis patients in India. *medRxiv*. 2020
- 48) Velayutham B, Jawahar MS, **Nair D**, Navaneethapandian P, Ponnuraja C, Chandrasekaran K, Narayan Sivaramakrishnan G, Makesh Kumar M, Paul Kumaran P, Ramesh Kumar S, Baskaran D. 4-month moxifloxacin containing regimens in the treatment of patients with sputum-positive pulmonary tuberculosis in South India—a randomised clinical trial. *Tropical Medicine & International Health*. 2020

Apr;25(4):483-95.

- 49) Kumar NP, Moideen K, Nancy A, Viswanathan V, Thiruvengadam K, **Nair D**, Banurekha VV, Sivakumar S, Hissar S, Kornfeld H, Babu S. Plasma chemokines are baseline predictors of unfavorable treatment outcomes in pulmonary tuberculosis. *Clinical Infectious Diseases*. 2021 Nov 1;73(9): e3419-27.
- 50) Improving treatment adherence among tuberculosis patients through evening DOTS in Chennai, India - a cohort study. Devaleenal BD, Jayabal L, **Nair D**, Muthusamy V, Rebecca P, Moses S - Accepted in *National medical Journal of India*.