

BIOGRAPHICAL SKETCH					
NAME			POSITION TITLE		
Dr. Vanaja Kumar			Scientist F		
EDUCATION/TRAINING					
INSTITUTION AND LOCATION		DEGREE	YEAR	FIELD OF STUDY	
Seethalakshmi	Achi College,	B. Sc	1967-70	Zoology,	
Pallathur, Tamil Nadu				Chemistry, Botany	
JIPMER, Pondicherry		M. Sc	1970-73	Medical Microbiology	
MB Station, Porto Novo, Tamil Nadu		Ph. D	1975- 79	Marine Biology (Microbiology)	

A. Research and / or Professional Experience

Designation	Period		Institution
	From	To	
Tutor	1974	1974	Magadh Medical college, Gaya
Research Assistant	1979	1982	Tuberculosis Research Centre, Chennai
Research Officer	1982	1988	Tuberculosis Research Centre, Chennai
Senior Research Officer	1988	1993	Tuberculosis Research Centre, Chennai
Assistant Director	1993	1998	Tuberculosis Research Centre, Chennai
Deputy Director	1998	2006	Tuberculosis Research Centre, Chennai
Scientist F	2006	Till date	Tuberculosis Research Centre, Chennai

B. Membership on Committees

Indian association of Pathologists and Microbiologists

Indian Association of Medical Microbiologists

Luminescence Society Of India

C. Selected Publications

1. Cheruvu Mani, N. Selvakumar, **Vanaja Kumar**, Sujatha Narayanan and P.R. Narayanan. Comparison of DNA sequencing, PCR-SSCP, and PhaB assays with indirect sensitivity test for detection of rifampicin resistance in *Mycobacterium tuberculosis*. **Int J Tuberc Lung Dis** **2003**; 7: 652-659. (Impact Factor: 1. 456)
 2. Marisa L. Pedulla, Michael E. Ford, Jennifer M. Houtz, Tharun Karthikeyan, Curtis Wadsworth, John A. Lewis, Debbie Jacobs-Sera, Jacob Falbo, Joseph Gross, Nicholas R. Pannunzio, William Brucker, **Vanaja Kumar**, Jayasankar Kandasamy, Lauren Keenan, Svetoslav Bardarov, Jordan Kriakov, Jeffrey G. Lawrence, William R. Jacobs Jr., Roger W. Hendrix and Graham F. Hatfull. Origins of highly mosaic mycobacteriophage genomes. **Cell** **2003**; 113: 171-182. (Impact Factor: 29.431).
 3. Alok Dube, K.Jayasankar, L.Prabakaran, **Vanaja Kumar**, PK Gupta. Nitrogen laser irradiation (337nm) causes temporary inactivation of clinical isolates of *Mycobacterium tuberculosis*. **Lasers in Medical Science** **2004**; 19: 52-56. (Impact Factor: 1. 27)
 4. Selvakumar N, **Vanaja Kumar**, P.G. Gopi, S. Sivagamasundari, E. Prabhakaran, Samuel Vasanthan, M.Perumal, P.R. Narayanan. Sputum AFB smears reading capability of Senior Tuberculosis Laboratory Supervisor trainees under training at a reference laboratory in India. **Ind J Tub. 2005**: 52: 11-14.
 5. Graham F. Hatfull, Marisa L. Pedulla, Deborah Jacobs-Sera, Pauline M. Cichon, Amy Foley, Michael E. Ford, Rebecca M. Gonda, Jennifer M. Houtz, Andrew J. Hryckowian, Vanessa A. Kelchner, Swathi Namburi, Kostandin V. Pajcini, Mark G. Popovich, Donald T. Schleicher, Brian Z. Simanek, Alexis L. Smith, Gina M. Zdanowicz, **Vanaja Kumar**, Craig L. Peebles, William R. Jacobs Jr., Jeffrey G. Lawrence, and Roger W. Hendrix. Exploring the mycobacteriophage metaproteome: phage genomics as an educational platform. **PloS Genetics** **2006**. 2(6): e92.
 6. Selvakumar N, M. Gomathi Sekar, **Vanaja Kumar**, D.Vijaya Bhaskar Rao, Fathima Rahman, P.R. Narayanan. 2006. Sensitivity of Ziehl-Neelsen method for centrifuged deposit smears of sputum samples transported in cetyl-pyridinium chloride. *Indian J Med Res.* 124: 439-442. (Impact Factor: 0. 869)
 7. Selvakumar N, **Vanaja Kumar**, S. Sivagamasundari, and P.R. Narayanan. Contamination of stored sputum AFB smears with environmental mycobacteria. **Int J Tuberc Lung Dis** **2006**. 10: 1299-1301. (Impact Factor: 1. 456)
 8. **Vanaja Kumar**, S. Balaji, N. S. Gomathi, P. Venkatesan, Gomathi Sekar, K. Jayasankar, and P. R. Narayanan. Phagebiotics to control the exponential growth of normal flora in processed sputum specimens grown overnight in liquid medium for rapid TB diagnosis. **Journal of Microbiological methods** **2007** 68:536-542. (Impact Factor: 2.297)
 9. Gomathi, N. S., H. Sameer, **Vanaja Kumar**, S. Balaji, V. N. Azger Dustackeer and P. R. Narayanan. *In silico* analysis of mycobacteriophage Che12 genome: characterization of genes
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required to lysogenise *Mycobacterium tuberculosis*. **Computational Biology and Chemistry** **2007**. 31(2):82-91. (Impact Factor: 2.196)

10. Sivakumar, P. M. S. Prabu Seenivasan, **Vanaja Kumar** and Mukesh Doble. Synthesis, antimycobacterial activity evaluation, and QSAR studies of chalcone derivatives. **Bioorganic Medicinal Chemistry Letters** **2007**. 17:1695-1700. (Impact Factor: 2.478)

11. Vinoth Kumar, T.S., Kavitha S., Lakshmi Narayanan L., Gomathi, N. S., **Vanaja Kumar**. Influence of irrigating needle tip design in removing bacteria from instrumented root canal using single tube luminometer. **Journal of Endodontics** **2007**. 33: 746-8. (Impact factor: 1.933)

12. Azger Dusthacker, **Vanaja Kumar**, Selvakumar Subbian, Gomathi Sivaramakrishnan, Guofang Zhu, Balaji Subramanyam, Sameer Hassan, Selvakumar Nagamaiah, John Chan and Narayanan Paranj Rama. Construction and evaluation of luciferase reporter phages for the detection of active and non replicating bacilli. **J Microbiological Methods** **2008**. DOI: 10.1016/j.mimet.2008.01.005.

13. **Vanaja Kumar**, Prabakaran Loganathan, Gomathi Sivaramakrishnan, Jordan Kriakov, Azger Dusthakeer, Balaji Subramanyam, John Chan, William R. Jacobs Jr., Narayanan Paranj Rama. Characterization of temperate phage Che12: construction of a new tool for diagnosis of tuberculosis. **Tuberculosis** **2008**. (Accepted for publication)

D. Research Support

S. No	Title	Funding Agency	Role
1	Potential Tuberculosis Drugs from Marine Actinomycetes	Department of Science and Technology	Principle Investigator
2	Protocol development for "Sensitivity and Specificity of <i>Mycobacterium tuberculosis</i> Screening and Diagnostics in HIV-Infected Individuals Initiating or Re-Initiating Antiretroviral Therapy"	The National Institute of Allergy and Infectious Diseases (NIAID)	Mycobacteriologist