## Curriculum Vitae

Name: Dr Raj Kamal

Present affiliation: Scientist-F (Medical) , Head Clinical Division, ICMR- NJIL&OMD, AGRA

Date of Birth- 27/09/1070 Date of Joining- 01/01/2001

Address: Dr Raj Kamal ,Scientist-F (Medical) , Head, Clinical Division, ICMR- NJIL&OMD,

Dr Miyazaki Road, Taj ganj, AGRA (U.P). 282004

Email: Kamal.rj@icmr.gov.in, rajushikamal@rediffmail.com, rajushikamal.rk@gmail.com Contact: 9412165560

## Qualifications:

| Sl<br>No | Degree | Institute (University)                                      | Year of passing | Subjects/ Specialization  |
|----------|--------|---|-----------------|---|
| 1.       | MD     | S. N . Medical College (Dr<br>B.R.Ambedkar University,Agra) | 2000            | Pediatrics  |
| 2.       | MBBS   | S. N . Medical College (Dr<br>B.R.Ambedkar University,Agra) |                 | Anatomy, Physiology, Biochemistry, Pathology,<br>Pharmacology, Microbiology, Social& Preventive<br>Medicine, Forensic Medicine, Medicine, Surgery, Gynae<br>&Obs, ENT, Ophthalmology, Orthopedics, Pediatrics,<br>Radiology, Psychiatrics |
| 3.       | B.Sc   | Agra College, Agra (Dr<br>B.R.Ambedkar University, Agra)    | 1989            | Botany, Zoology, Chemistry  |

## Employment:

| S1<br>No | Designation/Position          | Institute/organization   | From      | То         | Nature of work<br>(Research/teaching/others)   |
|----------|-------------------------------|--|-----------|------------|--|
| 1        | Scientist-F (Medical)         | National JALMA Institute<br>for Leprosy & Other<br>Mycobacterial Diseases,<br>Agra |           | Till Date  | Clinical Management of leprosy<br>patients and Research work in<br>leprosy& Tuberculosis                                     |
| 2        | Scientist-E (Medical)         | National JALMA Institute<br>for Leprosy & Other<br>Mycobacterial Diseases,<br>Agra | 1/09/2016 | 31/08/2021 | Clinical Management of leprosy patients and Research work in leprosy, Tuberculosis & HIV                                     |
| 3        | Scientist-D (Medical)         | National JALMA Institute<br>for Leprosy & Other<br>Mycobacterial Diseases,<br>Agra | 1/09/2012 | 31/08/2016 | Clinical Management of leprosy patients and Research work in leprosy, Tuberculosis & HIV                                     |
| 4        | Scientist-C (Medical)         | National JALMA Institute<br>for Leprosy & Other<br>Mycobacterial Diseases,<br>Agra | 1/01/2006 | 31/08/2012 | Clinical Management of leprosy patients and Research work in leprosy & Tuberculosis  |
| 5        | Scientist-B (Medical)         | Central JALMA Institute<br>for Leprosy   | 1/01/2001 | 31/12/2005 | Clinical Management of leprosy patients and Research work in leprosy   |
| 6        | MD( Resident)                 | SN Medical College Agra  | 1/06/1997 | 31/08/2000 | Clinical Management of various diseases of pediatric and in Neonetology and research in Leprosy in colleboration with JALMA. |
| 7        | Junior Resident in Pediatrics | Kalawati Saran Children<br>Hospital, Lady Harding<br>Medical College New<br>Delhi  | 1/01/1997 | 31/03/1997 | Clinical Management of various diseases of pediatric and in Neonetology Departments of the hospital                          |

| 8. | Junior Resident in | G.B PANT Hospital, | 1/04/1996 | 30/10/1996 | Providing assistance in reporting of |  |  |
|----|--------------------|--------------------|-----------|------------|--------------------------------------|--|--|
|    | Radiology          | N.Delhi            |           |            | x rays ,ultrasonography and in       |  |  |
|    |                    |                    |           |            | ERCP                                 |  |  |
|    |                    |                    |           |            |                                      |  |  |

- Research interests: Clinical trials in Leprosy & Tuberculosis (Expertise in Paediatric age)
- Clinical Experience:>24 Years

<u>Leprosy</u> More then 24 year experience of providing specialized clinical and medical care services to the patients of leprosy and other medical diseases particularly in pediatric age. Involved in studying the different techniques therapeutic and immunotherapeutic approaches and molecular tools for monitoring and improvement of treatment in leprosy and other mycobacterial diseases.

 $\overline{\text{T.B.}}$  More then 24 year experience of providing specialized clinical and medical care services to the patients of TB. Diagnosing the TB cases from the TB suspects attending the DOT Center and from leprosy and other cases at our institute according to RNTCP protocol. Providing treatments to all the TB cases . Sensitivity testing of Inj Streptomycin in CAT-II cases before Initiation of therapy. Follow up of all the cases on treatment. Reffering for AFB & DST. Identification of MDR-TB Suspects and Cases & providing treatment according to RNTCP. Monthly Reporting of Medication records of cases , supervisory activities ,IEC activities ,Referral activities, MDR-Case finding activities to the programme authorities.

<u>HIV</u> - Many of HIV +VE patients and with other co infections like HIV+TB, MDR TB, HIV +Leprosy, were thoroughly clinically examined & Screening of HIV suspects among all the TB, LEPROSY, and Other cases attending the institute were done during last 24 years.

- Research experience (in Years): >24 Years
- List of Research Project handled & Grants received:

| S. No | Type of<br>Project         | Title of project   | Duration<br>(Yrs.)  | Funding agency   | Funded amount | Level<br>of<br>Partici<br>pation | Status                           |
|-------|----------------------------|--|---|--|---------------|----------------------------------|----------------------------------|
| 1.    | R&D<br>(Govt.<br>Agencies) | Validation protocol for comparison of chest<br>X-ray image between Prognosys-PRO RAD-<br>Atlas (Ultra portable X-ray system) and<br>Standard Digital X-ray machine.( ICMR-<br>Contact research Intramural project) | 5 months<br>(Feb-June 2024)                                   | (ICMR-<br>Contact<br>research<br>Intramural<br>project)  | Intra-mural   | PI                               | Completed                        |
| 2.    | R&D<br>(Govt.<br>Agencies) | Validation protocol for comparison of chest<br>X-ray image between Mine 2 (Medical<br>handheld X-ray machine and Standard<br>Digital X-ray machine.(ICMR-Contact<br>research Intramural project)                   | 4months<br>(Dec 2021-March<br>2022)                           | .(ICMR-<br>Contact<br>research<br>Intramural<br>project) | Intra-mural   | PI                               | Completed                        |
| 3.    | R&D<br>(Govt.<br>Agencies) | Under Central Sector Scheme for<br>Establishment of Model Rural Health<br>Research Units - Proposals for setting up<br>MRHRUs in Uttar Pradesh.  | Initiated in FY2021-22  | DHR  | 1.50 Cror     | PI                               | On-going                         |
| 4.    | R&D<br>(Govt.<br>Agencies) | A multi-centric study on TB Elimination<br>entitled "A demonstration project for<br>reduction of tuberculosis in India", at<br>Mathura .UP (On going)  | 3 Years (2023-<br>2025)                                       | CTD-ICMR   | 1.31 Cror     | PI                               | On-going                         |
| 5.    | R&D<br>(Govt.<br>Agencies) | Clinical Trial on Prevention of Disability in<br>Persons Affected with Leprosy through<br>Homeopathy CCRH-ICMR Multi-centric<br>project  | 4 years<br>(2024-2028)  | CCRH-ICMR  | Rs 3.94 Cror  | PI                               | Grant released (To be initiated) |
| 6.    | R&D<br>(Govt.<br>Agencies) | MAY MEASURMENT MONTH (MMM Project)   | 1 Month<br>(1 <sup>st</sup> May-31 <sup>st</sup> May<br>2017) | PHFI,ICMR,<br>WHL  | Intra-mural   | PI                               | Completed                        |
| 7.    | R&D<br>(Govt.<br>Agencies) | Study of the predictors of therapeutic responses governing the regression and clearance of granulomas in response to chemotherapy with immunotherapy in borderline leprosy,  | 4 years (2010-<br>2014)                                       | ICMR-TASK<br>FORCE                                       | Rs 31,77,552  | PI                               | Completed                        |
| 8.    | R&D<br>(Govt.<br>Agencies) | Study Of Serum and Dermal Proteome Of<br>Borderline Leprosy (BT,BL) In Relation To<br>Therapeutic Changes Induced by<br>chemotherapy and chemotherapy with<br>immunotherapy ,                                      | 4 Years (2019-<br>2023)                                       | ICMR(Adhoc   | Rs 46,63,460  | PI                               | Completed                        |

| 9.  | R&D<br>(Govt.<br>Agencies) | Evaluation of the effect of addition of immunotherapy with Mw vaccine to standard chemotherapy in borderline leprosy.  | 5 years<br>(2002-2006) | ICMR-<br>Intrmural                 | Rs. 2,00,000  | PI    | Completed |
|-----|----------------------------|--|------------------------|------------------------------------|---------------|-------|-----------|
| 10. | R&D<br>(Govt.<br>Agencies  | Prevalence and risk factor of Silico-<br>tuberculosis and MDR-tuberculosis among<br>the silica exposure workers in glass industry<br>in Firozabad district (a multi-centric study).                              | 3 years                | ITRC-ICMR                          | Rs.2.56 Crore | CO-PI | Ongoing   |
| 11. | R&D<br>(Govt.<br>Agencies  | Survey to estimate new cases of leprosy and prevalence of leprosy-related disabilities in 10 high-priority states/Union territories in India. (A-LEP Project) Duration 3-0 Budget -10 caror (on-going)           | 3 Years                | CLD-ICMR                           | Rs. 10 Crore  | Co-PI | Ongoing   |
| 12. | R&D<br>(Govt.<br>Agencies  | Noval static progressive splint design for pre<br>operative domiciliary mobilization of ulnar<br>claw hand- A pilot study.Duration 3Years,<br>Medical Innovation Fund-ICMR, Total<br>Budget Rs 600000 (on-going) | 3 years                | Medical<br>Innovation<br>Fund-ICMR | Rs.6,00,000   | Co-PI | Ongoing   |
| 13. | R&D<br>(Govt.<br>Agencies  | Programmatic implementation and comparison of MIP Vaccine immuno-prophylaxis and rifampicin chemo-prophylaxis for contacts of leprosy patients under NLEP in high endemic settings                               | 3 Years                | CLD-ICMR                           | Rs.2.08 crore | Co-PI | Completed |
| 14. | R&D<br>(Govt.<br>Agencies  | Multi-centric trial to study the effect of early active mobilization as compare to 3 weeks immobilization following tendon transfer procedures for claw hand.  | 5 years                | ICMR-TASK<br>FORCE                 | Rs. 17,33,400 | Co-PI | Completed |
| 15. | R&D<br>(Govt.<br>Agencies  | Investigations of cellular markers and their implications in detecting treatment efficacy of tuberculosis.   | 3 YEARS                | DRDO                               | Rs 15,00,000  | Co-PI | Completed |
| 16. | R&D<br>(Govt.<br>Agencies  | Study of profile of deformity in new leprosy cases and to analyze predictive risk factors in the development and progression of the disability.  | 5 years                | ICMR                               | Intramural    | Co-PI | Ongoing   |
| 17. | R&D<br>(Govt.<br>Agencies  | Assessing the adherence of MDT in leprosy cases in recent five years.  | 3 years                | ICMR                               | Intramural    | Co-PI | Completed |

H-index: 8

Total number of Publications: 26

https://scholar.google.com/citations?user=qxNvZK8AAAAJ&hl=en&oi=sra

Patents (Filed/ Awarded): NiL Awards/ Fellowships/ Recognitions/Honors:

| S. No | Award Details  | Awarded by  | Year |
|-------|--|---|------|
| 1.    | Best poster award entitled "Evaluation of the effect of addition of immunotherapy with Mw vaccine to standard chemotherapy in borderline leprosy"24th biennial conference of the Indian Association of Leprologists, Agra from 12th-14th Nov 2005. | Indian Association of Leprologist                                 | 2005 |
| 2.    | Young Scientist" award for best paper presentation at '25th Biennial Conference of I.A.L', Kanpur, 19-21st NOV, 2007   | Immunology foundation   | 2007 |
| 3.    | Best poster award entitled as 'A follow up study of clinical and histopathological evaluation of the immunotherapeutic effect of Mycobacterium w (Mw) vaccine in borderline leprosy. IADVL (Dermacon 2009) 6-10 th Jan 2009                        | Indian Association of Dermetologist<br>Venerologist & Leprologist | 2009 |
| 4.    | Dr Manu patel memorial prize by IADVL for best presentation among all sections at "Dermacon 2009,6-10th Jan 2009, Bangalore  | Indian Association of Dermetologist<br>Venerologist & Leprologist | 2009 |
| 5.    | Winner of "Glaxo smith Quiz on topical steroids" by IADVL at Dermacon 2009, 6-10th Jan 2009, Bangalore   | Indian Association of Dermetologist<br>Venerologist & Leprologist | 2009 |
| 6.    | Fellowship "FICMCH" (Fellow of Indian College of Maternal and Child Health) by Indian college of maternal and child health .Kolkata. India in Feb 2015   | Indian College of Maternal & Child health, Kolkata. India         | 2015 |
| 7.    | Best Researcher Award in 12th International Scientist Awards on Engineering, Science, and Medicine at 20-21 NOV 2020 Visakhapatnam, India  | VDGOOD Professional Association<br>India                          | 2020 |

- Member of scientific societies/ bodies / committees with Registration number & Name of body.
  - 1. Life member of Indian Association of Leprologist, India, (R/664/UP/11(LM)
  - 2. Life member of National Association for Reproductive and Child Health of India , (7/322/NARCHI/2015)
  - 3. Life member of Indian Medical Association of India, (UP/14287/3/969/234742/2017-18/CL)
  - 4. Life member of Indian Association of Pediatrics of India, (L/2021/K/3105)
  - Member of Ethical committee of Institute of Mental Health and Hospital, Agra (ECR/1034/Inst/UP/2018)
  - 6. Member of Ethical committee of S N Medical College, Agra, (ECR/1409/Inst/UP/2020)
  - 7. Member of UP Medical Council. (REG. No. 40045/29/12/95)
  - 8. Member of VDGOOD Professional Association, Visakhapatnam, India,(VDSA2754)
  - 9. Member of Indian Association of Leprologist Academy (IAL Academy) as a coordinator of Leprosy focus group.

## Training courses attended-

- 1. Indo-US Workshop on HIV/STD Behavioral Prevention Research at CJIL, Agra, 22nd -24th Jan, 2003
- 2. ICMR-WHO Workshop on IPR& WTO issues at CJIL, Agra ,22nd -23rd Oct,2003
- 3. Indo-French (ICMR-INSERM) workshop on Tuberculosis, Agra, 12-14 Dec 2003
- 3rd Convention of Society for Immunology & Immunopathology (SIIP) and National symposium on cytokines & signal transduction at CJIL, Agra, 13th -15th Feb, 2004.
- IAL National CME and Workshop on "Newer technologies for patients care and epidemiology of leprosy and other mycobacterial disease "Agra, 12th Nov 2005
- 6. RNTCP training workshop of Medical Doctors on Orientation of DOTS. at Agra
- 7. ICMR-WHO Symposium on "Informal consultation on Rifampicin Resistance in Leprosy, Agra, 30th and-1st Dec.2006.
- 8. IAL National Workshop on Diagnosis & Management of leprosy in the context of integration of leprosy programme with general health services at CJIL, Agra, 18th-19th Oct, 2003
- 9. Dots plus stat level training of RNTCP, 28th to 30th Dec 2010 at Agra
- 10. National Acadamy of Medical Science CME Program on Tuberculosis in Children 28th Nov 2013, at SNMC, Agra
- 11. CDSA (India)- NIH (U.S.A) joint course on "Principles and Practice of Clinical Research 29 October 2012 to 3 November 2012, New Delhi
- 12. NIRT (India)- WHO & Sentinel project on pediatric drug resistant TB jointly organized training work shop on "Improving the quality of care for children with TB & Drug resistant TB ,17 June June 2013 to19 June 2013.NIRT, Chennai
- 13. NIH CoE, Bangalore (India)- PHRI, Mc Master University(Canada) jointly organized one week training course on "Health Research Methods & Evidence Based Medicine (HRM&EVM),18 Nov 2013.to 23 Nov 2013.St. John,s Medical College and Research Institute, Bangalore
- 14. National Academy of Medical Science (India)- organized CME PROGRAM on "Tuberculosis in Children 28 Nov 2013,S.N.Medical College, Agra
- 15. Training course on HIV TB collaborative project on OD vs INT anti TB treatment on HIV TB patients. 23 May 2014

  24 May 2014 NIRT, Chennai
- 16. 8th National CME cum Orientation of IAL session 2015, SNMC, Agra, 9/10/2015
- 17. 33rd Round Table conference on "Strategies for Elimination/Eradication of Leprosy" organized by Ranbaxy Science Foundation at Delhi on 4th Feb 2015.
- 18. OSP on training of liaison officers for ICMR at ISTM New Delhi from 18th Nov to 23th Nov 2014.
- 19. 1 Day seminar to frame/revise standard case definitions of various Terms being used under the National Leprosy Eradication Programme, held on 25th May 2016.
- 20. Work shop for making of Manuals for Medical officers and health workers for MIP vaccine and Rifampicin prophylaxis for implementation at endemic district organized by ICMR & CLD at Delhi from 8th Aug to 10th Aug 2016.
- Symposium on "Relapse and Drug resistance: Present Scenario and Critical Issues" organized by TLM, Delhi on 29th November 2017
- 22. CME organized by Indian journal of pediatrics and S N Medical College, AGRA On "Recent advances in pediatrics 17 Feb 2019 at Agra.
- 23. CME organized by core committee RNTCP- SNMC, AGRA On "Newer Modalities in diagnosis &treatment of tuberculosis held on 18 Feb 2019 at S N Medical college, Agra.
- 24. Attended 2 day training course entitled" Research Ethics &Good Practice -Current Scenario held on 15-16 Jan 2018 at NJIL&OMD ,Agra
- 25. Experts group meeting to finalize the protocol of Multi-centric clinical trial "Clinical Trial on Prevention of Disability in Persons Affected with Leprosy through Homeopathy" ev on 5th March 2019 at ICMR –HQ, New DELHI.
- 26. e –training course on "Introduction to good clinical laboratory practice" with a 90% score provided by Global Health Training Centre on 4th April 2019 Global Health Training Centre .WHO
- 27. e -training course on "ICH GOOD CLLINICAL PRACTICE E6 (R2)" with a 94% score, 3 June2020, Global Health Training Centre .WHO

- National Conferences/Seminars/Meetings attended: 75
- International Conferences/Seminars attended: 5
- 1. 17th International Leprosy Congress at Hyderabad during 30<sup>th</sup> JAN-4<sup>th</sup> FEB,2008 and presented a paper entitled "Evaluation of the effect of addition of immunotherapy with Mw vaccine to standard chemotherapy in borderline leprosy".
- 2. 3<sup>rd</sup> International Conference on TB Vaccine for the world at CDC, Atlanta Georgia, USA, 9<sup>th</sup>-11<sup>th</sup> April 2008. and presented a poster entitled "A follow up study of clinical and histopathological evaluation of the immunotherapeutic effect of Mycobacterium W (Mw) vaccine in borderline leprosy".
- 3. 11<sup>th</sup> Word Congress of Pediatric Dermetology (WCPD-2009),Bangkok,Thailand,17-20 NOV 2009, and presented a poster entitled "A follow up study of clinical and histopathological evaluation of the immunotherapeutic effect of Mycobacterium W (Mw) vaccine in borderline paediatricleprosy.
- 4. 20<sup>th</sup> International Leprosy Congress (Lepcon-20), Manila, Philipinnes 10th -13th September 2019 and presented a paper "Dermal Proteomic analysis of borderline leprosy to identify the changes in expression of proteins in response to chemotherapy and chemotherapy with immunotherapy (A double blind randomized placebo controlled study.) Session chaired by Dr. Steven Reed, President-CEO &Founder, Infectious Disease Research Institute, USA. This was the first dermal proteomic report presented in the congress in borderline leprosy patient using chemotherapy and chemotherapy plus immunotherapy.
- 5.21st International Leprosy Congress (Lepcon-21), Hyderabad, India  $8^{th}$  -11 November 2022 and presented a paper "Evaluation of diagnostic efficacy of R-Lep- PCR, Multiplex-PCR & Loop-mediated isothermal amplification (LAMP) methods in paediatric leprosy.

Chaired the session and lectures delivered in many National conferences and in CME etc.

More the 50 Awareness Workshop / Reconstructive camps /rehabilitation camps and webinar were organized for the leprosy patients till date as a part of IEC activities of NELP.

Imparting training, teaching, and research guidance as a faculty for annual human resource development programme of the institute

- Imparting training, teaching, and research guidance to various under graduate and post graduate student of biotechnology, Biochemistry, Microbiology, Immunology attending the summer training as annual programe of institute training imparted in various aspect of clinical medicine including tools and techniques and also to project trainees, Research scholars, Ph.D Students.
- Conducting Tour classes for MBBS Students of S.N. Medical College, Agra and Nursing students of other colleges and schools visiting our institution annually .
- Imparting training to Medical officers /Post graduates MD Students in various disciplines of clinical leprosy by organsing 1-2 weeks training workshops/webinars visiting our institution annually as covered under the National Leprosy Eradication Programme.
- Imparting training to Health workers/ ASHAs/ Nursing attendents in care / managements/rehabilitation of leprosy patents by organsing 1-2 weeks training workshops/webinars visiting our institution annually as covered under the National Leprosy Eradication Programme.
- Supervising the MD Thesis work of the post graduate MD students in pediatrics , Medicine and other disciplines of S.N.Medical college. Agra as a collaborative association with Medical colleges. 29 MD Students of pediatrics and other subjects of S.N.Medical college. Agra have completed their thesis work under supervision . 5 MD Students of pediatrics & other subjects are under supervision for their assigned thesis work.
- 14 MSc Student have completed their Dissertation work and 2 are assigned currently
- Reviewing applications for Short Term Studentship (STS) in annual program of ICMR for MBBS Students and also reviewing on line Extra Mural Research Projects from ICMR for eligibility of funding as assigned annually . Reviewing publications of International/National Journals as assigned.

<u>Administrative work</u> - contributing significant time of my duties for promotion and development of facilities and activities as a Chairperson, Nodal officers & as a member of various committees of the institute.