CURRICULUM VITAE

Name : Dr. Rajesh Kumar

Date of Birth : July 19, 1967

Designation: Additional Professor & Head

Department of Nuclear Medicine

All India Institute of Medical Sciences, Jodhpur

Address for correspondence : Additional Professor & Head

Department of Nuclear Medicine

All India Institute of Medical Sciences, Jodhpur Basni Phase -II, Jodhpur-342005, Rajasthan.

Mobile: +91 9448107545 Email: rajesh.nmd@gmail.com

ACADEMIC QUALIFICATIONS:

	School/Institute attended	Year of Completion
MBBS	AIIMS, Ansarinagar, New Delhi-110029, India.	1989
MD (Biophysics)	AIIMS, Ansarinagar, New Delhi-110029, India.	1998
DRM (Nuclear Medicine) Diploma in Radiation Medicine	Radiation Medicine Centre, Bhabha Atomic Research Centre, Tata Memorial Annexe Building, Jerbai Wadia Road, Parel, Mumbai- 400012, India.	2000

TEACHING EXPERIENCE (Present to past):

Position held	<u>Discipline</u>	College/Institute	<u>Period</u>
Additional Professor & Head	Nuclear Medicine	AIIMS, Jodhpur	01.07.2019 till date
Professor & Head	Nuclear Medicine	Kasturba Medical College, Manipal	01.10.2014 – 26.06.2019

Additional Professor	Nuclear Medicine	Kasturba Medical College, Manipal	16.07.2012 – 30.09.2014
Associate Professor	Nuclear Medicine	Kasturba Medical College, Manipal	14.06.2006 -15.07.2012
Assistant Professor	Nuclear Medicine	Kasturba Medical College, Manipal	14.06.2001 -13.06.2006
Junior Resident	Nuclear Medicine	Radiation Medicine Centre BARC, Mumbai, India.	02.08.1999 - 06.12.2000
		Britto, Marrisal, maia.	
Senior Research Fellow	Nuclear Medicine	Institute of Nuclear Medicine & Allied Sciences, Delhi	01.02.1999 - 19.07.1999

AREAS OF EXPERTISE: Nuclear Medicine, Biophysics.

RESEARCH AREAS OF INTEREST:

Thyroid Cancer, Radionuclide therapy, SPECT-CT Imaging, PET-CT Imaging.

RESEARCH EXPERIENCE:

Research Projects (Funded projects):

- Senior Research Fellow in the Research project titled "Basic and clinical studies with radio-modifiers for improving therapy of cancer" in Department of Nuclear Medicine, Institute of Nuclear Medicine & Allied Sciences, Delhi from 01.02.1999 to 19.07.1999. Research grant support by Defence Research and Development Organization (DRDO), New Delhi.
- **Principal Investigator** in the Research project "Brain SPECT imaging in the diagnosis of Mild Cognitive Impairment (MCI)". Research grant support by Manipal University, Manipal from 31.05.2007 to 30.05.2010.
- Co-investigator in the Research project "Trace element analysis for environmental and biomedical applications development of Laser Induced Breakdown Spectroscopy (LIBS) technique" in collaboration with Centre for Laser Spectroscopy, MAHE Life Science Centre, Manipal and Laser Plasma Division, BARC, Mumbai. Research grant support by Board of Research in Nuclear Sciences (BRNS), Bhabha Atomic Research Centre, Mumbai from 14.09.2007 to 13.09.2010.

- **Co-investigator** in the Research project "Assessment of Insulin secretion and sensitivity with oral glucose tolerance test in pregnancy." Research grant support by Manipal University, Manipal from 01.05.2008 to 30.04.2010.
- **Co-investigator** in the Research project "Blood Volume Analysis: A New Technique using Sodium Chromate Cr-51. An experimental and clinical study." Research grant support by Manipal University, Manipal from 01.01.2009 to 31.12.2010.
- Co-investigator in the Research project "Tissue electrical properties as a tool for early detection of hepatocellular carcinoma". Research grant support by DST-SERB, Govt. of India from September 2016 to September 2019.

Research Projects (Non-funded projects):

• January 1995 – December 1997:

Ultrastructure & DNA characterization in oral leukoplakia & squamous cell carcinoma.

Institution: All India Institute of Medical Sciences, New Delhi, India

August 1999 – December 2000:

Factors determining need for multiple doses of I-131 for the treatment of thyrotoxicosis.

Institution: Radiation Medicine Centre, Bhabha Atomic Research Centre, Mumbai,

India

December 2001 – March 2003:

Blood Volume Estimation in Burns Patients with Chromium-51.

Institution: Kasturba Medical College, Manipal, India

August 2006 – November 2007:

Pharmacokinetic studies of certain nasal drug delivery systems containing peptide drugs

like insulin.

Institution: Kasturba Medical College, Manipal, India

• April 2008 – September 2014:

Rapid method of blood volume analysis using Sodium chromate Cr-51.

Institution: Kasturba Medical College, Manipal, India

March 2009 – April 2010:

Estimation of drug levels in brain for the treatment of CNS disorders.

Institution: Kasturba Medical College, Manipal, India

• February 2016 – August 2016:

Study of radio-isotope tracer fluid using image processing.

Institution: Manipal Institute of Technology & Kasturba Medical College, Manipal.

October 2009 – October 2018:

Institution:

Dose individualization of Levothyroxine in patients with Post thyroidectomy and ¹³¹I

ablation therapy using Population Pharmacokinetic approach.

Kasturba Medical College, Manipal, India

3

PhD/MD/MSc. GUIDESHIP

- PhD guide at Manipal Academy of Higher Education, Manipal, India (since July 2012)
- PhD guide at All India Institute of Medical Sciences, Jodhpur, India (since November 2019)
- Guided PhD scholars (completed)
 - Dept. of Physiology, Melaka Manipal Medical College, Manipal University, Manipal (2008-2014). PhD thesis title Blood volume analysis: A new technique using sodium chromate Cr-51, an experimental and clinical study.
 - Dept. of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal (2009-2018) PhD thesis title - Dose individualization of Levothyroxine in patients with Post thyroidectomy and 1311 ablation therapy by using Population Pharmacokinetic approach.

• Guiding PhD scholars (ongoing) -

- Dept. of Nuclear Medicine, Manipal College of Health Professions, Manipal (2017-ongoing) PhD thesis title Modulatory effects of mito-tempo and piperine in mouse model of N-nitrosodiethylamine-induced hepatocarcinogenesis.
- Dept. of Nuclear Medicine, Manipal College of Health Professions, Manipal (2018-ongoing) PhD thesis title Development and assessment of magnetic nanoparticles for Asialoglycoprotein receptor-mediated delivery of radioactive phosphorous to hepatocytes.

Guided MS/MD theses (completed)

- > "Blood volume estimation in burns patients"— MS General Surgery completed in Dec. 2003 at Kasturba Medical College, Manipal.
- "A study of financial and operational feasibility of PET scanner facility at a tertiary care hospital." – MD Hospital Administration. 2012 – ongoing at Kasturba Medical College, Manipal.

Guiding MD theses (ongoing)

- "Comparison of low vs. high dose 177Lu-EDTMP therapy for palliation of painful bone metastases: RCT" MD Nuclear Medicine at All India Institute of Medical Sciences, Jodhpur.
- "Comparative study of Tc-99m GHA SPECT-CT, F-18-FDG PET-CT and MRI in imaging of primary brain tumors" – MD Nuclear Medicine at All India Institute of Medical Sciences, Jodhpur.
- "Role of whole-body MRI in lymphoma staging: a comparison with composite reference standard including 18F-FDG-PET/CT" – MD Radiodiagnosis at All India Institute of Medical Sciences, Jodhpur.
- "Assessment of Bone Mineral Density (BMD) and Trabecular Bone score (TBS) in patients of Hyperthyroidism" – DM Endocrinology at All India Institute of Medical Sciences, Jodhpur.

Guided MSc. Dissertation (completed)

- "Gastric Emptying time for solids in normal south Indian population" MSc. Nuclear Medicine Technology dissertation – completed in 2013 at Manipal College of Allied Health Sciences, Manipal.
- "Estimation of Effective Half Life of iodine 131-I in patients treated for Differentiated Thyroid carcinoma" – MSc. Nuclear Medicine Technology dissertation – completed in 2014 at School of Allied Health Sciences, Manipal.
- "Scintigraphic evaluation of salivary gland function in differentiated thyroid carcinoma patients undergoing 131-I treatment" – MSc. Nuclear Medicine Technology dissertation – completed in 2014 at School of Allied Health Sciences, Manipal.
- ➤ "Agreement between the 24 hour fractional thyroid uptake values calculated from 1311 scans obtained using gamma camera and thyroid uptake values obtained from probear retrospective study" MSc. Nuclear Medicine Technology dissertation completed in 2014 at School of Allied Health Sciences, Manipal.
- "Scintigraphic evaluation of salivary gland function in differentiated thyroid carcinoma patients after one year of 131-l treatment" – MSc. Nuclear Medicine Technology dissertation – completed in 2015 at School of Allied Health Sciences, Manipal.
- "Correlation between anterior and posterior dynamic imaging in Gastroesophageal reflux scintigraphy" – MSc. Nuclear Medicine Technology dissertation – completed in 2015 at School of Allied Health Sciences, Manipal.
- "Measurement of urinary iodine concentration in a variety of benign thyroid disorders in costal Karnataka region" – MSc. Nuclear Medicine Technology dissertation – completed in 2016 at School of Allied Health Sciences, Manipal.
- "Correlation of Thyroid uptake Measurements between Geiger Muller probe method and Scintillation thyroid uptake probe method—An Observational study" — MSc. Nuclear Medicine Technology dissertation — completed in 2016 at School of Allied Health Sciences, Manipal.
- "Correlation of Urinary iodine concentration and Serum Thyroid Stimulating Hormone in First Trimester of Pregnancy" MSc. Nuclear Medicine Technology dissertation completed in 2018 at School of Allied Health Sciences, Manipal.
- "Urinary iodine concentration in euthyroid adult population visiting in tertiary care hospital in coastal Karnataka" – MSc. Nuclear Medicine Technology dissertation – completed in 2018 at School of Allied Health Sciences, Manipal.
- "Radio-iodination and physicochemical characterization of polyethylenimine coated magnetic gold nanoparticles for future implications in hyperthermia coupled internal radiation therapy in cancer" – MSc. Nuclear Medicine Technology dissertation –at School of Allied Health Sciences, Manipal.

REVIEWERSHIP IN JOURNALS:

- 1. Journal of Society for Wound Care & Research
- 2. International Journal of Radiation Biology

REASEARCH PUBLICATIONS:

- 1. Rajesh Kumar, N. Nair. Factors determining need for multiple doses of 131-I treatment of thyrotoxicosis. Indian J Nucl Med 2000; 15(3):95.
- 2. P Nageswara Rao, **Rajesh Kumar**, Nandini Pandit. Scintigraphy in the detection of ectopic thyroid masses. Indian J Nucl Med 2001; 16(3):132-133.
- 3. Kumar P, Murtuza P, Bhaskara KG, **Kumar R**, Pandit N. *Intramuscular venous malformations of calf muscles*. Ind J of Plastic Surg 2002; 35:89-94.
- 4. Nandini Pandit, **Rajesh Kumar**, M S Vidyasagar. *Radionuclide venography in the diagnosis of intramuscular haemangioma*. Indian J Nucl Med 2002; 17(4):18.
- 5. **Rajesh Kumar**, Nandini Pandit, Vasumathi Bhat. *Thyroid aberration: Scintigraphy, a diagnostic tool.* Indian J Nucl Med 2002; 17(4):36.
- 6. **Rajesh Kumar**, Nandini Pandit, Indira V Upadhya, P N Rao, Vasumathi Bhat, George Varghese, M S Vidyasagar. *Sarcoidosis: Gallium-67 Scintigraphy.* Indian J Nucl Med 2003; 18(4):14.
- 7. **Rajesh Kumar**, Nandini Pandit, Indira V Upadhya, P N Rao, Vasumathi Bhat, M S Vidyasagar. *Osteofibrous Dysplasia: Bone Scintigraphy*. Indian J Nucl Med 2003;18(4):26.
- 8. Nandini Pandit, **Rajesh Kumar**, Indira V Upadhya, P N Rao, Vasumathi Bhat, M S Vidyasagar. *Multiple bone metastases in carcinoma cheek*. Indian J Nucl Med 2003;18(4): 26.
- 9. P Nageswara Rao, Nandini Pandit, **Rajesh Kumar**, Indira V Upadhya, M S Vidyasagar. *Ectopic functioning thyroid tissue in the thyroglossal duct detected by radionuclide Imaging*. Clin Nucl Med 2005;30(9):630. **PMID: 16100489.**
- 10. **Rajesh Kumar**, Nandini Pandit, Indira V Upadhya, Vasumathi Bhat. *Scintigraphic diagnosis of Myositis Ossificans*. Indian J Nucl Med 2006;21(4):92.
- 11. P N Rao, Nandini Pandit, **Rajesh Kumar**, M S Vidyasagar. *Dual ectopic as well as normotopic thyroid detected by technetium-99m pertechnetate scintigraphic procedure*. Indian J Nucl Med 2006; 21(4):92.
- 12. Pramod Kumar, **Rajesh Kumar**, Nandini Pandit, Amit Aggrawal, Prathap M. *Baby. Estimation of blood volume in burns patients using radioisotope chromium-51: A pilot study.* Burns 2007; 33(8):1072-1073. PMID: 17692469
- 13. **Kumar R**, Pandit N, Upadhya I, Bhat V. *Ectopic thoracic kidney a case report*. Intern Med J 2008;38(suppl. 3):A64.

- 14. **Kumar R**, Pandit N, Upadhaya IV, Vasumathi. *Gallbladder visualization on Post-therapy Iodine- 131 whole body scan A Case Report*. World J of Nucl Med 2010; 9(1):064.
- 15. **R Kumar**. Ectopic pelvic kidney detected as a cause for lumbosacral pain on bone scintigraphy. World J of Nucl Med 2010;9 (suppl.1):S118.
- 16. Pandit N, Alby T, **Kumar R**, Bhushan S, Upadhaya I, Bhat V, Shetty D. *Prevalence of measurable levels of thyroglobulin antibody among patients suffering from differentiated thyroid carcinoma in the west coast of the Indian subcontinent*. Indian J Nucl Med 2010; 25(3):99.
- 17. Bhushan Shivanand, Vasumathi B, Upadhya I, Shetty D, **Kumar Rajesh**, Pandit Nandini. *Patient–specific syringe fractionate unit dose model: Practicable and economical approach of cold kit fractionation in hospital radio pharmacy*. Indian J Nucl Med 2011; 26(Suppl):S37-38.
- 18. Srujan Kumar, N Pandit, **Rajesh Kumar**, S Bhushan, Vasumathi B, D. Rawat. *Importance of isotope scan amongst the imaging modalities*. Indian J Nucl Med 2011; 26(Suppl):S25.
- 19. Dr. Smita Sinha, Dr. Amar Ramachandran, **Dr. Rajesh Kumar***, Dr. Rajesh Bhakta, Dr. Akhila Vasudeva, Dr. Rajeshwari Bhat, Dr. Pratap Kumar. Evaluation Of Hysterosalpingoscintigraphy (HSSG) As A Tool For Tubal Patency Test. National Journal of Integrated Research in Medicine 2012; 3(4): 19-23.
- 20. **R. Kumar**, Vasumathi. Significance of post therapy SPECT-CT Scans in Differentiated Thyroid Cancer. World J of Nucl Med 2012;11(3):161-162.
- 21. CG Nayak, **R Kumar**, MM Heichel. *A Study of a Gamma Camera in Nuclear Medicine*. International Journal of Advanced Research in Computer Engineering & Technology 2013; 2(10):2742-2745
- 22. Prathap M Baby, Pramod Kumar, **Rajesh Kumar**, Sanu Susan Jacob. *Techniques for estimation of blood volume and their limitations in clinical settings*. J Soc for Wound Care & Research 2013; 6(1):3-13
- 23. Sudha D. Kamath, Sujatha Bhat, **K. Rajesh**, K. Srujan, R. Vrunda, Nandini Pandit. *Absorption Spectroscopy for the Quantification of Serum Thyroglobulin and Thyroglobulin Antibody Levels in Differentiated Thyroid Carcinoma Patients: A Pilot Study*. J. Med. Imaging Health Informatics 2014; 4(2):1-5.
- 24. Prathap Moothamadathil Baby, Pramod Kumar, **Rajesh Kumar**, Sanu S. Jacob, Dinesh Rawat, V. S. Binu, Kalesh M. Karun. *A novel method for blood volume estimation using trivalent chromium in rabbit models*. Indian J Plast Surg 2014;47(2):242-8. **PMCID: PMC4147461**
- 25. **Kumar R**. *Nuclear Medicine in the Management of Wounds*. J Soc for Wound Care & Research 2014; 7(1): 17-22.
- 26. Shenoy V, Prabhu M, **Kumar R**. Dose individualization of levothyroxine in patients with post thyroidectomy 131-I ablation therapy by using population pharmacokinetic approach. Endocrine Practice. 2016 May 1;22: 296.
- 27. **Rajesh Kumar**, Mukhyaprana Prabhu, Sreedhar R Pai, Vasudev Shenoy. *Review of Pharmacokinetics of Levothyroxine, with Specific Focus on Patient with Thyroid Carcinoma*. Journal of Global Pharma Technology. 2017;10(9):1:4

- 28. Prathap Moothamadathil Baby, Sanu Susan Jacob, **Rajesh Kumar**, Pramod Kumar. *An innovative approach for serial injection in marginal vein and blood collection from auricular artery in New Zealand white Rabbit*. MethodsX 4 (2017)457–460. **PMID: 29167756**
- 29. Vasumathi, **K. Rajesh**, P. S. Maya. *Analysis of effect of sample volume and dead time on activity measurements in a gamma-ray spectrometer for radioisotope 131-I.* Indian J Nucl Med 2017; 32(Suppl):S31.
- 30. Malapure SS, Bhushan S, **Kumar R**, Bharati S. *Radiolabelled nanoparticles in cancer management: Current status and developments.* Chemical biology letters, 2018; 5(1); 25-34.
- 31. **Dr Rajesh Kumar**, Dr Mukhyaprana Prabhu, Dr Sreedhar R Pai, Mr. Vasudev Shenoy. Evaluation of Covariates using Population Pharmacokinetics approach for dose Individualization of Levothyroxine in Patients with Post Thyroidectomy and 1311 ablation Therapy. Research J. Pharm. and Tech 2018; 11(5):2050-2054.
- 32. Shetty S, **Kumar R**, Bharati S. *Mito-TEMPO*, a mitochondria-targeted antioxidant, prevents *N-nitrosodiethylamine-induced hepatocarcinogenesis in mice*. Free Radical Biology and Medicine. 2019; 136: 76-86. **PMID: 30946961**
- 33. Balakrishnan R, Dalakoti P, Nayak DR, Pujary K, Singh R, **Kumar R**. *Efficacy of HRCT Imaging vs SPECT/CT Scans in the Staging of Malignant External Otitis*. Otolaryngology–Head and Neck Surgery. 2019; 161(2): 336–342. **PMID: 30987522**
- 34. Rai L, Hebbar S, Vengetesh PM, **Kumar R**. Association of Insulin Indices and Glucose Tolerance Test During Pregnancy in South Indian Women. Online J Health Allied Scs. 2019;18(1):2.
- 35. Baby PM, Kumar P, **Kumar R**, Jacob SS, Rawat D, Binu VS, Karun KM, Bhat NB. *Serial blood volume estimation in rabbits using trivalent chromium–An exploratory study.* MethodsX. 2019 Jan 1;6:1068-71.

 PMID: 31193381.
- 36. Shetty S, Anushree U, Kumar R, Bharati S. Electrical conductivity spectra of hepatic tumors reflect hepatocellular carcinoma progression in mice. Biomedical Physics & Engineering Express. 2020 Oct 7;6(6):065019.

BOOK CHAPTER:

1. **Rajesh Kumar**. *Nuclear Medicine in Surgery*. In Manipal Manual of Surgery 3rd edition, 2010 (pp. 895-905). Author; Rajgopal Shenoy. CBS Publishers.

INVITED LECTURES / PANELS / CHAIRING SESSION:

- Nuclear Imaging in Breast Cancer. CME on "Breast Cancer Update 2003", Kasturba Medical College, Manipal, (2003).
- Role of I-131 in the treatment of differentiated thyroid cancer. CME Surgery 2007, Kasturba Medical College, Manipal (2007).
- Nuclear Medicine in the Management of Wounds. 1st International meet & 4th Annual National Conference of Society for Wound Care & Research, Kasturba Medical College, Manipal (2010).

- Radionuclide imaging in Urology. Urology Symposium 2010. Kasturba Medical College, Manipal (2010).
- Radionuclide imaging in nephro-urology. CME on Nephro-urology 2014. Kasturba Medical College, Manipal (2014).
- Cost effective technology in Nuclear Medicine. Workshop "Advances in Medical Technology Towards Current Healthcare Necessities" Manipal Institute of Technology, Manipal (2014).
- Introduction to nuclear medicine & Basic principles of PET. Workshop "MR Customer Environment and Workflows", Manipal Global Education Services, Manipal ((2015).
- Nuclear Medicine in Clinics. CME Indian Medical Association Udupi-Karavali (2017)
- Nuclear Medicine in Urology. CME: Urology Postgraduate Meet 2017. Kasturba Medical College, Manipal (2017).
- Imaging in Nuclear Medicine. Dept. of Biomedical Engineering, Manipal Institute of Technology, Manipal (2017).
- Panel session -Thyroid cancer. Workshop on Head and Neck Onco-surgery and Hands-on Cadaver laser dissection course. Kasturba Medical College, Manipal (2017).
- Panel session Management of metastatic breast cancer. CME-Breastcon 2018. Kasturba Medical College, Manipal (2018).
- Nuclear Imaging. Dept. of Biomedical Engineering, Manipal Institute of Technology, Manipal (2018)
- Diuretic Renography. CME: Urology Postgraduate Meet 2019. Kasturba Medical College, Manipal (2019).
- Panel session Management of thyroid swelling. Annual Conference of the Association of Surgeons of India – Rajasthan Chapter (ASIRAJ 2019). All India Institute of Medical Sciences, Jodhpur (2019).
- Panel session Tumor Board-Cancer Endometrium. 1st Rajasthan state chapter conference of Association of Gynaecologic Oncologists of India RAJAGOICON-2020, 22nd - 23rd February 2020, AIIMS, Jodhpur.

CONFERENCE PRESENTATIONS:

- Rajesh Kumar. Possible role of colloidal gold labelling in understanding molecular nuclear medicine. Society of Nuclear Medicine India Northern Chapter Meeting, New Delhi, India, (April 1999)
- Rajesh Kumar, N. Nair. Factors determining need for multiple doses of 131-I treatment of thyrotoxicosis. 32nd Annual Conference of Society of Nuclear Medicine India (SNMI), Mumbai, India (December 2000).

- Nandini Pandit, Rajesh Kumar, M S Vidyasagar. Radionuclide venography in the diagnosis of intramuscular hemangioma. 34th Annual Conference of Society of Nuclear Medicine India (SNMI), Calcutta, India (December 2002).
- Rajesh Kumar, Nandini Pandit. Thyroid aberration: Scintigraphy, a diagnostic tool. 34th Annual Conference of Society of Nuclear Medicine India (SNMI), Calcutta, India (December 2002).
- Rajesh Kumar, Nandini Pandit, P N Rao, I Upadhya, M S Vidyasagar, K K Rao. Detection of skeletal metastasis in carcinoma cervix by radionuclide scintigraphy. 2nd South Asian Association for Regional Cooperation (SAARC) Conference on Clinical Oncology, Kathmandu, Nepal (March 2003).
- Rajesh Kumar, Nandini Pandit., George Varghese, M S Vidyasagar. Sarcoidosis: Gallium-67 Scintigraphy. 35th Annual Conference of Society of Nuclear Medicine India (SNMI), Bhopal, India (December 2003).
- Rajesh Kumar, Nandini Pandit, Indira Upadhya, PN Rao, Vasumathi B, M S Vidyasagar.
 Osteofibrous Dysplasia: Bone Scintigraphy. 35th Annual Conference of Society of Nuclear Medicine India (SNMI), Bhopal, India (December 2003).
- Nandini Pandit, Rajesh Kumar, Indira Upadhya, P N Rao, Vasumathi B, M S Vidyasagar.
 Multiple bone metastases in carcinoma cheek. 35th Annual Conference of Society of Nuclear Medicine India (SNMI), Bhopal, India. (December 2003).
- Rajesh Kumar. Scintigraphic diagnosis of pleuroperitoneal communication. 2nd Annual Conference of Association of Nuclear Medicine Physicians of India (ANMPI), Darjeeling, India, (October 2004).
- Rajesh Kumar. Hydrocephalus in Paget's disease. 3rd Annual Conference of Association of Nuclear Medicine Physicians of India (ANMPI), Srinagar, India, (September 2005).
- Rajesh Kumar, Nandini Pandit, Indira V Upadhya, Vasumathi B. Scintigraphic diagnosis of Myositis Ossificans. 38th Annual Conference of Society of Nuclear Medicine India (SNMI), Jamshedpur, India (December 2006).
- P N Rao, Nandini Pandit, **Rajesh Kumar**, M S Vidyasagar. *Dual ectopic as well as normotopic thyroid detected by technetium -99 pertechnetate scintigraphic procedure.* 38th Annual Conference of Society of Nuclear Medicine India (SNMI), Jamshedpur, India (December 2006).
- Rajesh Kumar, Nandini Pandit, Indira V Upadhya, Vasumathi B. *Ectopic thoracic kidney a case report.* 37th Annual Meeting of Australian and New Zealand Society of Nuclear Medicine, Adelaide, Australia, (April 2007)
- Rajesh Kumar. Multifocal Skeletal Tuberculosis Resembling Metastatic Disease on Bone Scintigraphy.2nd Singapore General hospital Nuclear Medicine Update, Singapore, (March 2009)
- A Karthik, C Mallikarjuna Rao, G Subramanian, A Ranjith Kumar, V S Gopal, M S Reddy, N Udupa, A K Mishra, K Chuttani, Rajesh Kumar. Nasal drug delivery of Rivastigmine: An approach to brain targeting for the treatment of Alzheimer's disease. Masterskill University College of Health Sciences (MUCH) International Scientific Conference 2009, Genting Highlands, Malaysia (November 2009)

- Rajesh Kumar, Nandini Pandit, Indira V Upadhya, Vasumathi B. Gallbladder Visualization on Post-Therapy Iodine-131 Whole Body Scan – A Case Report. 19th Annual Scientific Meeting of the Singapore Radiological Society and College of Radiologists, Singapore (February 2010).
- Rajesh Kumar. Ectopic pelvic kidney detected as a cause for lumbosacral pain on bone scintigraphy. 10th Congress of the World Federation of Nuclear Medicine and Biology, Capetown, South Africa (September 2010).
- Pandit N, Alby T, Kumar R, Bhushan S, Upadhaya I, Bhat V, Shetty D. Prevalence of measurable levels of thyroglobulin antibody among patients suffering from differentiated thyroid carcinoma in the west coast of the Indian subcontinent. 42nd Annual Conference of Society of Nuclear Medicine India (SNMI), Chandigarh, India (November 2010).
- Bhushan Shivanand, Vasumathi B, Upadhya I, Shetty D, Kumar Rajesh, Pandit Nandini. Patient–specific syringe fractionate unit dose model: Practicable and economical approach of cold kit fractionation in hospital radio pharmacy. 43rd Annual Conference of Society of Nuclear Medicine India (SNMI), Chennai, India (December 2011).
- Srujan Kumar, N Pandit, Rajesh Kumar, S Bhushan, Vasumathi B, D. Rawat. Importance of isotope scan amongst the imaging modalities. 43rd Annual Conference of Society of Nuclear Medicine India (SNMI), Chennai, India (December 2011).
- **Kumar R**, Pandit N, Bhushan S, Vasumathi, Kumar S, Rawat D. *Empiric* ¹³¹*I therapy in a patient with undetectable serum thyroglobulin in presence of antithyroglobulin antibody and negative* ¹³¹*I whole body scan.* 5th Singapore General hospital Nuclear Medicine Update, Singapore, (March 2012).
- R. Kumar, Vasumathi. Significance of post-therapy SPECT-CT scans in differentiated thyroid cancer. 7th International Conference on Radiopharmaceutical Therapy, Levi, Finland (Nov. 2012)
- Vasumathi, K. Rajesh, P. S. Maya. Analysis of effect of sample volume and dead time on activity measurements in a gamma ray spectrometer for radioisotope I-131. 49th Annual Conference of Society of Nuclear Medicine India (SNMI), Delhi, India (December 2017).

CHAIRING OF ACADEMIC SESSION AT CONFERENCES

- Chaired the session on *SPECT-CT Imaging* at CME on "Nuclear Imaging", Kasturba Hospital, Manipal, India, (November 2006).
- Chaired the session on *Nuclear Thyroidology* at CME on "Nuclear Imaging", Kasturba Hospital, Manipal, India, (November 2006).
- Chaired the session on *Skeletal Scintigraphy* at 41st Annual Conference of Society of Nuclear Medicine India (SNMI), Jaipur, India (December 2009).
- Chaired the session on Neuroendocrine Tumors at 20th Annual Conference of Society of Nuclear Medicine India (SNMI) – Southern Chapter, Bangalore, India (August 2014).

 Chaired the session on Radiopharmaceuticals at 49th Annual Conference of Society of Nuclear Medicine India (SNMI), Delhi, India (December 2017).

CONFERENCE / SYMPOSIUM / CME / WORKSHOP ORGANIZED:

- 11th Annual Conference of Society of Nuclear Medicine India Southern Chapter, August 2005, at Kasturba Medical College, Manipal.
- CME on "Nuclear Imaging", November 2006 at Kasturba Hospital, Manipal.
- CME on "PET-CT: A new standard in Diagnostic Imaging", December 2007 at Kasturba Hospital, Manipal.
- Workshop on "Medical Cyclotron & PET-CT", April 2010 at Kasturba Medical College, Manipal.
- CME on "Nuclear Medicine Technology Update", March 2016, School of Allied Health Sciences, Manipal.
- 22nd Annual Conference of Society of Nuclear Medicine India Southern Chapter, August 2016, at Kasturba Medical College, Manipal.

AWARDS:

- National Talent Search Scholarship awarded by the Government of INDIA in 1982.
- Travel Grant awarded by Association of Nuclear Medicine Physicians of India (ANMPI) for the oral presentation at 3rd Annual Conference of Association of Nuclear Medicine Physicians of India (ANMPI) at Sher-e-Kashmir Institute of Medical Sciences, Srinagar, India in 2005.
- Travel Grant awarded by Association of Nuclear Medicine Physicians of India (ANMPI) for the oral presentation at 2nd SGH Nuclear Medicine Update – 2009, Post Graduate Medical Institute, Singapore General Hospital, Singapore in 2009.
- Australian Government Endeavour Executive Award in 2011.

PROFESSIONAL CERTIFICATIONS / FELLOWSHIP:

- "Certification in diagnostic nuclear medicine and low dose nuclear medicine therapeutic Procedures" - by Atomic Energy Regulatory Board, BARC, Mumbai, India in 2001.
- "Radiation Safety Officer II (Diagnostic Nuclear Medicine) Certification" by Atomic Energy Regulatory Board, Bhabha Atomic Research Centre, Mumbai, India in 2001.

- "Certification in high dose nuclear medicine therapeutic procedures including I-131 therapy in thyroid cancer" by Atomic Energy Regulatory Board, BARC, Mumbai, India in 2002.
- Clinical Fellowship in PET-CT & Cyclotron at the PET-CT departments at Westmead Hospital, Sydney, Austin Hospital, Melbourne; and Peter MacCallum Cancer Centre, Melbourne, Australia under the "Foundations of PET-CT" program, University of Sydney, Australia for a period of six weeks starting from 05.09.2011 to 14.10.2011.

PROFESSIONAL ASSIGNMENTS & ACTIVITIES

- Member of Radiation Safety Committee at Kasturba Hospital, Manipal (2001-2019)
- Member of Nuclear Physics Group, MAHE, Manipal in 2005.
- Member of Manipal Advanced Research Group, MAHE, Manipal (2006 2009)
- Member of the four Doctoral Committees at MAHE, Manipal.
- Member of the Board of Studies for Nuclear Medicine, Manipal University, India (2009-2019).
- Member of the Board of Studies for Centre for Atomic and Molecular Physics, Manipal University, Manipal, India since (2012 – 2019).
- Head of the Department of Nuclear Medicine, Manipal College of Allied Health Sciences, Manipal University, Manipal (2012 – 2019).
- Head of the Division of Nuclear Medicine, Kasturba Medical College, Manipal University, Manipal (2012 – 2019).
- Chairperson of Board of Studies for Nuclear Medicine, Manipal University, India (2012-2019).
- Designed and implemented the course curriculum for the 3yrs' BSc. Nuclear Medicine Technology training program at Manipal College of Allied Health Sciences, Manipal, India in 2001.
- Designed and implemented the course curriculum for the 1year Diploma in Nuclear Medicine Technology training program at Manipal College of Allied Health Sciences, Manipal, India in 2001.
- Designed and implemented the course curriculum for the 2years' MSc. Radiation Physics training program at Kasturba Medical College, Manipal, India in 2004.
- Designed and implemented the course curriculum for the 2years' MSc. Nuclear Medicine Technology training program at Manipal College of Allied Health Sciences, Manipal, India in 2007.
- Head of the Department of Nuclear Medicine, All India Institute of Medical Sciences, Jodhpur since 01.07.2019. I have established the Department of Nuclear Medicine with SPECT-CT and PET-CT imaging facility.

- Invited and participated as a resource faculty to review and frame the Syllabus for screening test for recruitment to the post of Assistant Professor, Nuclear Medicine in Rajasthan Public Service Commission" in March 2020 at Rajasthan Public Service Commission, Ajmer.
- Designed and implemented the course curriculum for the MD Nuclear Medicine program at All India Institute of Medical Sciences, Jodhpur in 2020.

MEMBERSHIP OF SCIENTIFIC SOCIETIES & PROFESSIONAL BODIES:

- Life Member of "Society of Nuclear Medicine (India)".
- Associate Member of "World Federation of Nuclear Medicine and Biology".
- Life Member of "Association of Nuclear Medicine Physicians of India".
- Member of "World Association of Radiopharmaceutical and Molecular Therapy".