

Curriculum vitae

Dr. SAYANTANI SINHA

CURRENT POSITION

CONSULTANT, DEPARTMENT OF NUCLEAR MEDICINE, TATA MEDICAL CENTRE, KOLKATA
DNB AND IIT FACULTY (THESIS GUIDE)
(FELLOWSHIP IN NUCLEAR ONCOLOGY)

ACHIEVEMENTS & PRIZE IN NUCLEAR MEDICINE FIELD: -

- Oral presentation: -1st prize in Current role of PET-CT scan in NSCLC- Oct 2017 CME, NUCLEAR MEDICINE, SKIMS
- Oral presentation: -1st prize in Incremental value of F-15 diuretic Renogram in obstructive uropathy with equivocal results on F+20 using Tc 99m EC- Dec 2017 49th SNMICON, DELHI-
- Oral presentation- 2nd prize in the oral paper session at the Annual conference of the "Association of Nuclear Medicine Physicians of India "at PGIMER ,Chandigarh , Sept 2024
- Poster presentation- 2nd prize in Incremental value of FDG PET CT over CECT in non regional nodes in incidental Ca Gallbladder at the 3rd IHPBA HPB Radiology Course in Jan 2026

FACULTY INVITES

- Role of Lu 177 PSMA THERAPY in MCRPC in URO-ONCOLOGY seminar, KOLKATA, March 2021
- Panel Discussion: Management of Borderline resectable Pancreatic Cancer- International Onco Summit (NIOS 2023) - Kolkata on 30th January 2023.
- Panel Discussion: Management of Local Recurrence in Head and Neck Cancer- International Onco-Summit (NIOS 2024) - On Lung and Head Neck Malignancies Kolkata on 6th January 2024.
- Urinary bladder cancer – Role of PET/CT, CME URONUCLEO-SYNERGYCON 2025, RNM center Rohtak-124001.
- Speaker- Role of Diagnostic Nuclear medicine-An overview, ITC royal, Kolkata, June 28th 2025, HOPECON 2025
- Panel Discussion: "Recurrent Head and Neck Cancer: Lessons in Failure" symposium at Tata Medical Center, Kolkata, Dec 2024.

International Scientific paper presentations:

- Poster presentation – Incremental Value Of F-15 Tc 99m EC (Technetium-99m- labelled N,N ethylenedicysteine) Diuretic Renogram in Adult Male Patients of Obstructive Uropathy with Equivocal Results on F+20 Diuretic Renogram in British Nuclear Medicine Society, Annual Spring meeting 2024, Belfast, 14th May 2024
- Oral presentation- Comparison and correlation of Mi-PSMA expression score and PI-RADS score in patients with newly diagnosed prostate cancer, BRICS INTERNATIONAL FORUM ON NUCLEAR MEDICINE 20 June, 2024, Saint Petersburg
- Poster presentation - Feasibility study of 68 Gallium-FAPI PET-CT in staging of non-small cell lung carcinoma (NSCLC) and Invasive Ductal Carcinoma of Breast: Comparison with FDG PET CT in 2024, SNMMI Annual Meeting (June 8 - 11, 2024)

TEACHING EXPERIENCE

- FACULTY IN ACADEMIC PROGRAM OF D.N.B NUCLEAR MEDICINE IN TATA MEDICAL CENTRE, KOLKATA.
- FACULTY IN ACADEMIC PROGRAM OF M.SC NUCLEAR MEDICINE (JOINT VENTURE BY IIT KHARAGPUR AND TMC, KOLKATA).
- THESIS GUIDE TO M.SC AND DNB/MD STUDENTS (Comparison and correlation of Mi-PSMA expression score and PI-RADS score in patients with newly diagnosed prostate cancer by Mr. SUMIT ADHIKARI, M.Sc. Nuclear Medicine, Period of Thesis Guidance -15.01.24- 20.04.24).
- THESIS co GUIDE TO Dr. Abhishek MP, DNB Resident in Quantitative PSMA PET Biomarkers for Predicting Response to ¹⁷⁷Lu-PSMA Therapy in metastatic Prostate Cancer.
- THESIS co GUIDE TO Dr. Shinu LS, DNB Resident in Quantitative SSTR PET Biomarkers for Predicting Response to ¹⁷⁷Lu-PPRT Therapy in metastatic neuroendocrine tumour.

EDUCATION

Qualification	Institute / Organization	Board / University	Year	% / CGPA
DNB (Nuclear Medicine)	SHER I-KASHMIR INSTITUTE OF MEDICAL SCIENCES, SRINAGAR	SHER I-KASHMIR INSTITUTE OF MEDICAL SCIENCES, SRINAGAR	2016-2019	CLEARED IN FIRST ATTEMPT
SHER- I-KASHMIR INSTITUTE OF MEDICAL SCIENCES, SRINAGAR (J & K, INDIA) is one of the premier institutes of India having One PET/CT, One SPECT (Gamma Camera), Low dose therapy, Dedicated 4 Bed Therapy Ward for High dose Therapy (I-131, Lu-PSMA, Lu-Dotatate & Bone pain palliation therapy etc.).				
M.B.B.S	R.G.KAR MEDICAL COLLEGE AND HOSPITAL, KOLKATA	R.G.KAR MEDICAL COLLEGE AND HOSPITAL, KOLKATA	2008 - 2013	70%
Sr. Secondary	BHARATIYA VIDYA BHAVANS, SALT LAKE (KOLKATA)	C.B.S.E	2008	93%
Secondary	BHARATIYA VIDYA BHAVANS, SALT LAKE (KOLKATA)	C.B.S.E	2006	90%
Radiation Safety Officer (RSO II)	BARC, MUMBAI	BARC, MUMBAI	2019	Cleared

WORK EXPERIENCE

1. CONSULTANT, DEPARTMENT OF NUCLEAR MEDICINE, August 2021-Present TATA MEDICAL CENTRE, KOLKATA

Key Responsibilities: -

- Preparation of reports of various scans done on SPECT/CT and PET/CT
- Patient history taking and radiopharmaceutical administration
- Image interpretation under gamma camera and PET/CT
- Education of staff, Radiation Safety Officer and technologist as per AERB Guidelines
- Periodic radiation safety checkup
- Tumor Board Meeting with Consultants from various Departments

2. CLINICAL ASSOCIATE, DEPARTMENT OF NUCLEAR MEDICINE, August 2020-July 2021 TATA MEDICAL CENTRE, KOLKATA

- Preparation of reports of various scans done on SPECT/CT and PET/CT
- Patient history taking and radiopharmaceutical administration
- Image interpretation under gamma camera and PET/CT
- Education of staff, Radiation Safety Officer and technologist as per AERB Guidelines
- Periodic radiation safety checkup
- Tumor Board Meeting with Consultants from various Departments

3. CONSULTANT, DEPARTMENT OF NUCLEAR MEDICINE, August 2019-July 2020 AMERICAN ONCOLOGY INSTITUTE, NAGPUR

- Preparation of reports of various scans done on SPECT/CT and PET/CT
- Patient history taking and radiopharmaceutical administration
- Image interpretation under gamma camera and PET/CT
- Education of staff, Radiation Safety Officer and technologist as per AERB Guidelines
- Periodic radiation safety checkup
- Tumor Board Meeting with Consultants from various Departments

4. CONSULTANT, DEPARTMENT OF NUCLEAR MEDICINE, July 2019 AMERICAN ONCOLOGY INSTITUTE, JAMMU

- Preparation of reports of various scans done on SPECT/CT and PET/CT
- Patient history taking and radiopharmaceutical administration
- Image interpretation under gamma camera and PET/CT
- Education of staff, Radiation Safety Officer and technologist as per AERB Guidelines
- Periodic radiation safety checkup
- Tumor Board Meeting with Consultants from various Departments

5. SENIOR RESIDENTSHIP NUCLEAR MEDICINE May 2019-June 2019 DELHI STATE CANCER INSTITUTE,

- Preparation of reports of various scans done on SPECT/CT and PET/CT
- Patient history taking and radiopharmaceutical administration
- Image interpretation under gamma camera and PET/CT
- Education of staff, Radiation Safety Officer and technologist as per AERB Guidelines
- Periodic radiation safety checkup
- Tumor Board Meeting with Consultants from various Departments

6. SENIOR RESIDENTSHIP April 2019

**7. JUNIOR RESIDENT SHER- I-KASHMIR INSTITUTE OF MEDICAL 2016 - 2019
SCIENCES, SRINAGAR**

Key Responsibilities:

- Preparation of various Tc-99m labelled radiopharmaceuticals (DTPA, DMSA, EC, MDP, Mebrofenin etc.)
- Patient history taking, preparation and radiopharmaceutical administration
- Administration of I-131, Sm-153, Re-188 and Lu-177 labelled Radiopharmaceutical ➤ Checking QC of various radiopharmaceutical
- Image Interpretation and Report Preparation for various gamma camera and PET/CT scans/Investigations
- QC of gamma camera and PET/CT
- Patient notes taking and providing high dose I-131, Sm-153, Re-188 and Lu-177 Labelled Therapy
- Presentation of various case reports, Grand Rounds and Departmental seminars ➤ Preparation of Radiopharmaceuticals, acquisition of scans, processing, interpretation and reporting.
- 3 months posting in the department of radiology, 1 month posting each in cardiology and endocrinology departments during the course

8. EXPERIENCE IN THE DEPARTMENTS OTHER THAN NUCLEAR MEDICINE

- Housestaffship in Department of Chest Medicine, R.G. Kar Medical College and Hospital, Kolkata (April- June 2014).
- Housestaffship in Department of Pediatric Surgery, R.G. Kar Medical College and Hospital, Kolkata (July- December 2014).
- Medical Officer in Department of Pediatric, Daffodils Hospital & Matri Mangal Pratishtan, Kolkata (2015).
- Resident Doctor in Department of Surgical Oncology, Apollo Hospital, Kolkata (Jan 2016 – Feb 2016).

Experience in PET/CT

- PET/CT for Oncology using tracers like 18F FDG, 68Ga DOTATATE, 18F-Choline, 18F-MISO, 68Ga RGD, Ga-68 FAPI, PSMA
- PET/CT for Cardiac perfusion using 13N-NH3 and Viability using 18F-FDG
- PET/CT for Brain Studies
- PET/CT for Infection Imaging
- Assisted PET CT Guided Biopsy using Robotic Arm (ROBIO)

Experience in Radionuclide Therapy

- Low dose radioiodine (I-131) therapy for hyperthyroidism
- High dose radioiodine (I-131) therapy for thyroid cancer
- Bone pain palliation using 153 Sm - samarium and Rhenium-188
- Lutetium-177 Dotatate therapy for neuroendocrine tumors
- Lutetium-177 PSMA therapy for Ca Prostate

Experience in SPECT/CT and Cardiac Gamma Camera

- Bone scan –whole body and SPECT/CT
- DTPA / EC Renogram and interventional studies
- DMSA scan
- DRCG scan
- HIDA – hepatobiliary scan
- Liver RES scan

- Stress Myocardial Perfusion Scintigraphy
- Myocardial Viability studies
- First pass and equilibrium gated radionuclide angiogram
- Thyroid uptake and scan
- Gastroesophageal reflux studies
- Gastroesophageal transit time and motility studies
- Brain SPECT perfusion studies
- CSF leak studies
- Parathyroid scintigraphy
- Salivary scintigraphy
- Lacrimal scintigraphy
- Pleuro peritoneal shunt studies
- ¹³¹I MIBG scan
- ¹³¹I whole body scan

RESEARCH EXPERIENCE

- Project team member on Regulatory Aspects of Artificial Intelligence in Medical Imaging in India: A Systematic Review
- Thesis work “Incremental Value Of F-15 Tc 99m EC (Technetium-99m- labelled N,N-ethylenedicysteine) Diuretic Renogram in Adult Male Patients of Obstructive Uropathy with Equivocal Results on F+20 Diuretic Renogram” during DNB (Nuclear Medicine) in SKIMS, Srinagar (J & K) India. This work is being done under guidance of Dr Shoukat Hussain Khan, HOD Nuclear Medicine, SKIMS, Srinagar (J&K), INDIA.

PUBLICATIONS

- Detection of Axillary Lymph Node Involvement in Early-Stage Breast Cancer: Comparison between Staging 18 F-2-Fluoro-2-Deoxy-D-Glucose Positron Emission Tomography–Computed Tomography Scans, Mammography, and Sentinel Lymph Node Biopsy -- Jayanta Das, Raju Gupta, Sayantani Sinha, Soumendranath Ray, Indian Journal of Nuclear Medicine 38(3):p 249-254, Jul–Sep 2023
- Jayanta Das, Tapesh Bhattacharya, Sayantani Sinha, Soumendranath Ray, Indian Journal of Thoracic and Cardiovascular Surgery- <https://doi.org/10.1007/s12055-020-01100-1>
- Cerebral spinal fluid cisternography in normal pressure hydrocephalus of the elderly Shoukat Hussain Khan, Tanveer Ahmed Rather, Sayantani Sinha, Indian Journal of Nuclear Medicine- Volume 32/3/ July-September 2017

ACHIEVEMENTS & PRIZE EXTRACURRICULAR ACTIVITY: - ➤

- MANY BADMINTON CHAMPIONSHIPS WON AS WINNER AND RUNNERS UP. ➤
- WINNER OF WEST BENGAL QUINTESSENTIAL 2022.
- WINNER OF MISS INDIA QUINTESSENTIAL 2022
- SENIOR DIPLOMA IN BHARATNATYAM AND JUNIOR DIPLOMA IN KATHAK FROM ALLAHABAD GHARANA.
- 5th YEAR IN INDIAN CLASSICAL MUSIC FROM VISHMADEV GHARANA.

DECLARATION

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Dr. Sayantani Sinha

**Consultant, Nuclear Medicine
Department of Nuclear Medicine
Tata Medical center, Kolkata**