
Dr. Vijay Paul Samuel

Office address:

Professor and Chairperson
Department of Anatomy
Ras Al Khaimah College of Medical Sciences
Ras Al Khaimah Medical and Health Sciences University
Ras Al Khaimah, UAE

ACADEMIC QUALIFICATION:

Ph.D(Anatomy)

Year of Graduation: 2005
Institution: Melaka Manipal Medical College, Manipal
University: Manipal Academy of Higher Education
Thesis: Effect of sodium valproate and phenytoin sodium on reproductive parameters in adult male wistar rats

Medical M.Sc. (Medical Anatomy)

Grade: First class
Year of graduation: 1998
Institute: Kasturba Medical College, Mangalore, Karnataka, India
University: Manipal Academy of Higher Education.

B.Sc. (Microbiology, Chemistry, Botany)

Grade: First class
Year of graduation: 1995
Institute: St. Aloysius College Mangalore, Karnataka, India
University: Mangalore University.

SKILLS IN RESEARCH TECHNIQUES:

- Expertise with techniques in surgical preparation of animals for research.
- Expertise with techniques in preparation of animals for toxicity studies.

- Expertise in histopathological techniques:
 - Basic histological techniques of processing and staining of tissues for microscopic studies
- Expertise in creating excision wound model in rats for testing the healing or non-healing properties of various medicinal plants and allopathic drugs
- Expertise in creating incision wound model to determine tensile wound strength.
- Use of various e-learning platforms and tools such as, Moodle, Mendley, Sakai, Mahara, Zotero, End note, Kahoot, Turnitin and Turning point.
- Use of various software packages of Microsoft such as word, excel, power point and software for statistical analysis
- Basic statistics in research (SPSS)
- Embalming and preserving the cadaver

FELLOWSHIP:

Fellow of Academy of General Education (FAGE).

WORKSHOPS ATTENDED:

- Support Learners of Determination Training Course
- Annual Safeguarding training course
- Workshop on Stereology
- “Stem Cell Therapy Hope or Hype” held at RAKMHSU

- Prevention of cervical cancer – An update held at RAKMHSU
- Updates in fetal medicine practice held at RAKMHSU
- Trends in Minimal invasive surgery held at RAKMHSU
- Advances in surgical specialities held at RAKMHSU
- Current trends in Neonatal and Paediatric practice held at RAKMHSU
- Competency Framework Workshop Held online on 13th Jan 2022.

Held by : Medical Education Department –CMHS- UAEU

- “Micrometry in Microscopic Image Analysis using ImageJ Software” organized by Department of Anatomy, JIPMER, Pondicherry on 12th Feb 2022.
- Let's Break the Chain of COVID-19 Infection – Course Completed from MBRU University.
- COVID-19 Response Training Course: Experience from Frontline Experts in the UAE - College of Medicine and Health Sciences, UAE University
- Symposium on Medical Education “Challenges in Health Professions Education for 21st century”.
- IFOM Exam and MCQ writing.
- Educational research
- Research Methods and Data Analysis
- Leadership Workshop
- Charting the Sea, Afresh and Setting Sail SWOT Analysis.
- Molecular Biology Tools (Hand- On – Workshop).
- The changing role of teacher in health care profession by Ron Harden
- Bringing Education Skills to the Workplace

- Redesigning Education to Survive the Second Machine Age
- Workshop on Data Analysis (SPSS & AMOS).
- ICH – GCP Guidelines to Conduct Clinical Trials
- Faculty Development workshop
- Plastination
- Faculty Development Workshop-Discipline Specific Teaching of Professionalism.
- Pre-Conference Workshop on Engaging the Gen Y Students through Future Oriented Thinking
- Pre-Conference Workshop on Educational Leadership
- Workshop on research Proposal Design and Writing
- Workshop on Best Practices in Supervisory Process.
- Assessment Blueprint workshop
- Student Interview workshop
- Mentor/mentee workshop
- PBL workshop
- Script concordance Test Workshop
- OSCE training workshop.

WORKSHOP and CONFERENCES FACILITATED

- Chairperson at 70th National conference of Anatomical society of India.
- Stereology Workshop
- Script concordance test on ethical dilemma- Standard setting workshop
- National annual conference of Anatomical Society of India 2001

- USMLE workshop held at International Medical University, Malaysia.
- Organizing Committee Member of the 8th and 12th RAKMHSU Students Scientific Conference.
- Integrated Teaching Workshop at RAKMHSU

Research Projects

- Principle investigator in the project approved by the RAKMHSU Research Ethical Committee titled Evaluation of efficacy of combined administration of *Azadirachta Indica* (neem) leaves and Metformin on healing of wounds in diabetic rats.
- Principle investigator in the project approved by the RAKMHSU Research Ethical Committee titled “Effect of aqueous extract of *Azadirachta Indica* (neem) leaves on steroid depressed wounds in rats”.
- Co- Investigator in the project titled “Efficacy of mupirocin with chitosan and collagen as compared to mupirocin only on experimentally induced incision wound healing in Wistar rats”.
- Co- Investigator in the project titled “Effect of mesenchymal stem cells-condition medium on biochemical indices and morphological characteristics of hepatocytes in carbon tetrachloride-induced liver cirrhosis in rats”
- Co- Investigator in the project titled “Effect of early life positive experience on maternal separation and isolation stress induced changes in brain and behavior”.

- Supervisor for the student project titled “The role of Resveratrol as a Potential Therapeutic Agent for attenuating Hepatotoxicity Induced by Paracetamol and Alcohol: Mechanisms and Implications”.
- Supervisor for the student project titled “From Books to Bedside: Stress Levels in Pre-Clinical and Clinical Medical Students”.
- Supervisor for the student project titled “Application of Nanobots in Biomedicine: A Promising Frontier for Targeted Therapy”
- Supervisor for the student project titled “From Silent Threat to Early Detection: Unveiling Alzheimer’s Disease Biomarkers”.
- Supervisor for student project titled “Role of Human Leucocyte Antigen in the pathophysiology of Diabetes Mellitus”
- Supervisor for student project titled “Synthesis of Immune Evading Pancreatic Cell Clusters for the treatment of Diabetes Type 1”.
- Supervisor for student project titled “A promising treatment for wound healing in Diabetic patients: Stem cell Therapy”
- Supervisor for student project titled “Assessment of effectiveness of Neem Leaves extract on healing of wounds in rats treated with NSAIDS”.
- Supervisor for student project titled “Diabetes Mellitus and Covid -19: A bidirectional interaction between two pandemics”.
- Principle investigator in the project titled “Effect of sodium valproate and phenytoin sodium on reproductive parameters in adult male wistar rats”.
- Assisted in the project titled “Dacarbazine induced reproductive toxicity in rats”.

- Co- Investigator in the research project titled “Developing a SCT Tool to assess ethical reasoning ability among medical students”.
- Co –investigator in the research project titled “Evaluation of antioxidant and antimicrobial activity of alkaloidal fraction of *Berberis aristata* against *Propionibacterium acnes*”

PAPER PRESENTATIONS AND CONFERENCES ATTENDED:

- 70th National conference of Anatomical society of India.
- 2nd UAE anatomy Conference 2023, Held at Mohammed Bin Rashid University of Medicine and Health Sciences.
- RAKMHSU Students Scientific Conference.2023, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- 1st UAE anatomy Conference 2023, Held at Ajman University.
- RAKMHSU Students Scientific Conference.2022, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- RAKMHSU Students Scientific Conference.2021, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- RAKMHSU Students Scientific Conference.2020, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- RAKMHSU Students Scientific Conference.2019, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- RAKMHSU Students Scientific Conference.2018, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- RAKMHSU Students Scientific Conference.2017, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- RAKMHSU Students Scientific Conference.2016, Held at RAKMHSU, Ras Al Khaimah, United Arab Emirates.
- 10th International Medical Conference, 2015 held at International Medical University, Kuala Lumpur, Malaysia.
- 11th International Medical Conference, 2016 held at International Medical University, Kuala Lumpur, Malaysia.

- Development of Script Concordance Test to assess ethical reasoning ability: A preliminary study- Poster presentation at AMEE-2014, Milan Italy.
- 9th International Medical Conference, 2014 held at International Medical University, Kuala Lumpur, Malaysia.
- 8th International Medical Conference, 2013 held at International Medical University, Kuala Lumpur, Malaysia.
- 44th Annual Conference of Indian Pharmacological Society held at Manipal, India in December 2011.
- 58th National Conference and CME of the Anatomical Society of India held at Pune, India in December 2010.
- 54th National Conference of the Association of Physiologists and Pharmacologists of India held at Mangalore in December 2008.
- 54th national conference of Anatomical Society of India held at Kochi in December 2006- A rare case of combined neurovascular and muscular variations in the arm.
- A Rare Variation in the Branching Pattern of Axillary artery – Case report at 53rd national conference of Anatomical Society of India held at Nagpur in December 2005
- 49th National Conference and CME of the Anatomical Society of India - December 2001
- “Extra intercostal space - A case report” at *48th National Conference of Anatomical Society of India* held at Dehradun in February 2001.
- “Effect of Endosulfan on the ovaries of wistar rats” at the *International conference of Pharmacologists* held at New Delhi in December 1999.
- “ Multiple variation in the anterior compartment of the arm - A case report” at *46th National conference of Anatomical Society of India* held at Karad in December 1998.

AWARDS

- Best Lecturer award in the School of Medical Sciences, IMU for the year 2014. Awarded by the IMU Scholarship committee during the Faculty Appreciation Week.
- Best Lecturer award in the School of Medical Sciences, IMU for the year 2015. Awarded by the IMU Scholarship committee during the Faculty Appreciation Week.

- Best Lecturer award in the School of Medical Sciences, IMU for the year 2016. Awarded by the IMU Scholarship committee during the Faculty Appreciation Week.
- First Place for supervising the undergraduate students In the Clinical Sciences at Ninth Undergraduate Research Competition held by Abdu Dhabi University
- Fourth Prize for in oral presentations for guiding the Undergraduate students at the 12th RAKMHSU students scientific conference.
- Fourth Prize for in poster presentations for guiding the Undergraduate students at the 12th RAKMHSU students scientific conference.
- Fourth Prize for in oral presentations for guiding the Undergraduate students at the 8th RAKMHSU students scientific conference.
- First Place in the Faculty Badminton competition held in the year 2016-17 at RAKMHSU.
- Second Place in the Faculty Badminton competition held in the year 2017-18 at Manipal.

MEMBERSHIP IN PROFESSIONAL BODIES

- Member of the American Association of Anatomists.

VISITING FACULTY

- Invited by the College of Medicine, University of Sharjah to deliver anatomy lectures to MBBS Year 1 and Year 2 students in 2016.

COMMUNITY SERVICE

- Coordinated the Anatomy Stall and participated as a volunteer in the Science Exhibition 2024 held at RAKMHSU, RAs Al Khaimah, UAE.

- Coordinated the Anatomy Stall and participated as a volunteer in the Science Exhibition 2020 held at RAKMHSU, RAs Al Khaimah, UAE.
- Coordinated the Anatomy Stall and participated as a volunteer in the Science Exhibition 2023 held at RAKMHSU, RAs Al Khaimah, UAE.
- Coordinated and participated in activities performed by IMU students to entertain the children at NASOM(National Autism Society of Malaysia), Kuala Lumpur, Malaysia.
- Coordinated and participated in group activities performed by IMU students at SCASST Kuala Lumpur, Malaysia.

RESEARCH PUBLICATION:

1. MALAT1: A key regulator in lung cancer pathogenesis and therapeutic targeting. *Pathol Res Pract.* 2024 Jan;253:154991.
2. Exploring the role of Incrna neat1 knockdown in regulating apoptosis across multiple cancer types: A review. *Pathol Res Pract.* 2023 Dec;252:154908.
3. Immunopathology of herpes simplex virus-associated neuroinflammation: Unveiling the mysteries. *Rev Med Virol.* 2024 Jan;34(1):e2491.
4. Global Burden of Cardiovascular Diseases and Risks Collaborators. Global Burden of Cardiovascular Diseases and Risks, 1990-2022. *J Am Coll Cardiol.* 2023 Dec 19;82(25):2350-2473.
5. Bilateral variation in the branching pattern of the subclavian artery: an unusual finding with clinical implications. *J Vasc Bras.* 2023 Mar 27;22:

- 6.** Efficacy of mupirocin with chitosan and collagen as compared to mupirocin only on experimentally induced incision wound healing in wistar rats. *Ejpmr* 2021, 8(3),101-104.
- 7.** Wound healing potential of azadirachta indica(neem) leaves. *ejpmr*, 2020,7(10), 29-35.
- 8.** Molecular signaling of G-protein-coupled receptor in chronic heart failure and associated complications. *Drug Dev Res.* 2020 Feb;81(1):23-31. doi: 10.1002/ddr.21627. Epub 2019 Nov 30. PMID: 31785110.
- 9.** Current Update on Preclinical and Clinical Studies of Resveratrol, a Naturally Occurring Phenolic Compound. *Eukaryotic Gene Expression*, 29(6):529–537 (2019).
- 10.**Metformin: A Salutary Candidate for Colorectal Cancer Treatment in Patients with Diabetes. *Journal of Environmental Pathology, Toxicology and Oncology*, 38(2):133–141 (2019).
- 11.** Nrf2/HO-1 Mediated Protective Activity of Genistein Against Doxorubicin-Induced Cardiac Toxicity. *J Environ Pathol Toxicol Oncol.* 2019;38(2):143-152. doi: 10.1615/JEnvironPatholToxicolOncol.
- 12.**A contemporary biological pathway of islet amyloid polypeptide for the management of diabetic dementia. *Chemico-Biological Interactions* 306 (2019) 117–122.
- 13.**Combinational effect of angiotensin receptor blocker and folic acid therapy on uric acid and creatinine level in hyperhomocysteinemia associated hypertension. *Biotechnology and Applied Biochemistry.* 2019 Sep;66(5):715-719.

- 14.**Development and Validation of a Script Concordance Test (SCT) to Evaluate Ethical Reasoning Ability Among First and Fifth Year Students in a Medical School. *Journal of Academic Ethics* (2019) 17:193–204.
- 15.**Forensic identification by using Insertion-deletion polymorphism. *International Journal of Human Genetics* 15(2):55-59 June 2015.
- 16.**Reproductive toxicity of sodium valproate in male rats. *Indian J Pharmacol.* 2010 April; 42(2): 90–94.
- 17.**Effect of phenytoin sodium on the biochemical parameters of reproductive function in male albino wistar rats. *JPBS*, 2009; 14-18
- 18.**Effect of phenytoin sodium on reproductive parameters in adult male wistar rats. *KMJ*, 2009; 41(1):43-51
- 19.**The effect of sodium valproate on the biochemical parameters of reproductive function in male albino wistar rats. *Indian J Pharmacol*, 2008; 40 (6): 247 – 249
- 20.**Dacarbazine induces genotoxic and cytotoxic germ cell damage with concomitant decrease in testosterone and increase in lactate dehydrogenase concentration in the testis. *Mutat Res.* 2006 Jun 19.
- 21.**Nrf2/HO-1 Mediated Protective Activity of Genistein Against doxorubicin Induced Cardiac Toxicity. *J Environ Pathol Toxicol Oncol.* 2019;38(2):143-152.
- 22.**Unusual pectoralis major muscle: The chondroepitrochlearis – A case report – *Anatomical Science International*(2007)
- 23.**A rare origin of upper root of ansa cervicalis from vagus nerve – a case report – *Neuroanatomy* (2005) -4:8-9

- 24.**Multiple variations in the paired arteries of the abdomen – a case report
– Clinical anatomy.
- 25.**A rare variation in the upper trunk of brachial plexus; a case report–
Neuroanatomy (2005) – 4:37 –38
- 26.**Unusual position of external carotid artery; a case report. Indian Journal
of Plastic Surgery Indian Journal of Plastic Surgery (ISSN: 0970-0358) Vol
38 Num 2 01/2005
- 27.**Absence of inferior pancreaticoduodenal artery compensated by dorsal
pancreatic artery- A case report – Kathmandu University Medical Journal
(2006). Vol 4, 256- 257
- 28.**An anomalous Abductor digiti minimi muscle – A case report – Eur J Anat,
9(3), 155-56(2005).
- 29.**Concurrent variations of brachial plexus, musculocutaneous nerve and
biceps brachii – A case report – Neuroanatomy(2006); 5:30 – 32
- 30.**A Rare Entrapment Of Medial Root Of Median Nerve Between Axillary
Artery And Its Anomalous Branch – Internet Journal Of Neurology (2006),
Vol 5, Number 2.
- 31.**A rare variation in the branching pattern of axillary artery: Indian Journal
of Plastic Surgery (2006), Vol 39, Issue 2.
- 32.**Four cases of Variations in the forearm extensor musculature in a study
of hundred limbs and review of literature: Indian Journal of Plastic Surgery
(2006),Vol 39, Issue 2.
- 33.**Ethical, Social and Legal Intricacies on Facial Transplant. Anthropologist,
25(1,2): 117-121 (2016).

Citation Metrics (Scopus)

- H-index- 11
- Total Number of Documents- 26
- Total number of citations- 313

PEER REVIEWER FOR THE FOLLOWING JOURNALS

- Anatomical Sciences Education.
- Clinical Anatomy.
- Argentine Journal of Clinical Anatomy
- International Journal of Medicine and Public Health
- Journal of clinical and diagnostic research.

CURRENT JOB DESCRIPTION:

- Professor and Chairperson, Department of Human Anatomy, RAKCOMS, Ras Al Khaimah, United Arab Emirates.

TEACHING EXPERIENCE:

- Professor in Department of Anatomy, Ras Al Khaimah Medical and Health Sciences University, UAE from September 2022 till date.
- Associate Professor in Department of Anatomy, Ras Al Khaimah Medical and Health Sciences University, UAE from August 2016 till August 2022.
- Senior Lecturer in Department of Human Biology, Anatomy Division at International Medical University, Kuala Lumpur, Malaysia from November 2012 to July 2016.

- Associate Professor of Anatomy, SUT Academy of Medical Sciences, Vattapara, Trivandrum, Kerala.
- Associate Professor of Gross Anatomy, Embryology & Histology at St. George's University, School of Medicine, St. George's, Grenada from July 1st 2011 to June 30th, 2012.
- Assistant Professor of Gross Anatomy & Histology at St. George's University, School of Medicine, St. George's, Grenada from August 2007 to June 30 2011.
- Assistant Professor of Human Anatomy at Saba University School of Medicine, SABA Netherland Antilles, Dutch West Indies from March 2006 to August 2007.
- Assistant Professor of Human Anatomy at Melaka Manipal Medical College (Manipal Campus) International Centre for Health Sciences, Manipal University, India from December 2005 to March 2006.
- Senior Lecturer of Human Anatomy at Melaka Manipal Medical College (Manipal Campus) International Centre for Health Sciences, Manipal University, India from October 2004 to December 2005
- Lecturer of Anatomy at Melaka Manipal Medical College (Manipal Campus) International Centre for Health Sciences, Manipal University, India from September, 1998 to September 2004.
- Senior Lecturer of Human Anatomy- Manipal College of Medical Sciences, Pokhara, Nepal.

PROFESSIONAL EXPERIENCE:

1. Teaching Human Anatomy (Histology, Neuroanatomy, Embryology and Gross Anatomy) to:

- Medical Students of all semesters at Ras Al Khaimah Medical and Health Sciences University,
- Dental and Nursing students at Ras Al Khaimah Medical and Health Sciences University,
- Medical Students of all semesters at International Medical University
- Chiropractic, Biomed, Chinese Medicine and Dental Students at International Medical University
- Phase I medical students of the West Indies - Manipal twinning program, where the curriculum is integrated and problem-based
- First year medical students of Melaka Manipal Medical College (Manipal Campus) where the curriculum has an integrated approach
- First year medical Students of Manipal college of Medical Sciences, Pokhara, Nepal.
- Premedical students of Melaka Manipal Medical College
- First semester medical students of Saba University School of Medicine
- First Term medical students at St. George's University.
- First term nursing and premed students at St. George's University.
- Teaching includes Didactic lecture, PBL, TBL, SDL, (Self Directed Learning), Dissection, histology lab and Medical Museum Sessions.

2. Preparing specification tables

3. Setting question papers (Essay, OBA and MCQ), conducting and evaluating written examinations, objectively structured spotters exams (OSSE) and oral examinations (viva voce)
4. Conducting and evaluating objective structured practical examination.
5. Conducting and evaluating problem based learning (PBL) sessions
6. Evaluating objective structured clinical examinations (OSCE)
7. Setting USMLE based questions in Anatomy and Histology.
8. Conducting and Evaluating Team Based Learning (TBL)

ADMINISTRATIVE ACTIVITIES:

Chairperson: Department of Anatomy, Ras Al Khaimah Medical and Health Sciences University.

Programme coordinator: MBBS Year 1 coordinator and Nursing coordinator for Anatomy at Ras Al Khaimah Medical and Health Sciences University,

Module Coordinator: Hematology Module at Ras Al Khaimah Medical and Health Sciences University.

Module Coordinator: Cardiovascular system, School of Medicine, International Medical University.

Marketing: Represented the School of Medicine, International Medical University in the various marketing events at diverse Educational fairs in Malaysia between 2012 and 2016.

Charity: Actively coordinated and participated in charity activities conducted at the International Medical University between 2012 and 2016.

Secretary: Department of Human Biology, International Medical University.

Representative: For the Human Biology Department at Dental curriculum and assessing committee (DCAC).

Secretary: Module Coordinators meeting for the School of Medicine at International Medical University.

Mentor: For over 20 students at International Medical University, Kuala Lumpur

Deputy Course Director and Research Co-ordinator: For Anatomy 460(Premed and Foundation) at St. George's University.

Member: Clicker Subcommittee, CCTL (**Committee for Technology Teaching and Learning**), St. George's University

Faculty Advisor: For over 40 students of St. Georges University

Mentor:

For students of Melaka Manipal Medical College (Manipal Campus) Manipal.

Faculty in charge: Examination Duties which include setting of the invigilation list, making arrangements for the examination hall and responsible for the smooth conduction of all exams.

Faculty in charge: Seminar presentations by visiting professors at St. George's University.

Faculty Guardian: For students of Saba University School of Medicine.

EXTRACURRICULAR RESPONSIBILITIES:

Faculty coordinator for sports and student magazine at Melaka Manipal Medical College.

Assistant Chief Judge and Quiz Master for the **Grenada National brain bee challenge.**

Represented International Medical University at various Badminton Tournaments between 2012 and 2016.

EXAMINERSHIPS:

External Foreign Examiner for

- PhD candidates at Manipal University, India.
- PhD candidates at Yenepoya University, India.

Internal examiner for

- OSPE at RAK Medical and Health Sciences University
- OSCE at RAK Medical and Health Sciences University
- OSPE at International Medical University, Malaysia
- OSCE at International Medical University, Malaysia
- OSPE at St.Geroge's University, Grenada
- OSPE at Saba University School of Medicine, Saba, Netherland Antilles.
- Answer paper evaluations in Anatomy at International Medical University for Medical, Chiropractic, Dental and Chinese medicine students.
- OSCE at International Centre for Health Sciences, Manipal India
- Answer Paper valuation and Viva voce in Anatomy for medical students of Melaka Manipal Medical College (Manipal Campus) Manipal, India.
- Answer Paper valuation and Viva voce in Anatomy for nursing students of Manipal University, Manipal, India.
- Answer Paper valuation and Viva voce in Anatomy for allied health students of Manipal University, Manipal, India.

External examiner for

- Paper evaluation and Viva voce in Anatomy for various allied health science courses at Manipal Academy of Higher Education.

