


## Curriculum Vitae:

***Dr. Raj Sahajanandan. M.D, DNB(Anesthesiology) FRCA***

### Personal details

Name	Dr. Raj Sahajanandan	
Date of birth	22-03-1974	
Address:	Professor, Department of Anesthesia, Christian Medical College Vellore 632004	
E mail address:	<a href="mailto:rajsahajanandan@gmail.com">rajsahajanandan@gmail.com</a> <a href="mailto:drsraj@cmcvellore.ac.in">drsraj@cmcvellore.ac.in</a>	
Phone :	Mobile : 91 - 8489622336 91-416 2282105(O), 91-416 2284441 (R)	

### PROFESSIONAL QUALIFICATIONS

FRCA	Royal College of Anesthesia, London, 2011
DNB	Diplomate of National Board, New Delhi, 2005
MD (Anaesthesia)	Maulana Azad Medical College, New Delhi, 2002
MBBS	Medical College, Trivandrum, Kerala, India, 1996

### PROFESSIONAL AFFILIATIONS

Fellow of Royal College of Anesthesia  
Life member IACTA  
Life Member ISA  
Life member Airway Management Foundation  
Life member AiDiAA  
Life Member IMA  
Life Member Indian College of Anesthesia (ICA)  
Full Registration GMC (7032073)  
Full Registration Tamil Nadu Medical Council (85990)  
Full Registration Travancore Cochin Medical Council (26016)  
Member EACTA  
Member ICCA

### **Areas of Interest**

Cardiac & Thoracic Anesthesia

Difficult airway

Perioperative ultrasound ( FATE, TEE & lung Ultrasound)

Regional Anesthesia

### **CLINICAL EXPERIENCE**

<b>Post</b>	<b>Institution</b>	<b>Time</b>
Head of Unit 4	Christian Medical College, Vellore	Jun 18 to present
Professor	Christian Medical College, Vellore	Jun 13 to Jun 18
Associate professor	Christian Medical College, Vellore	Mar 12 to Jun 13
Cardiac Fellow	Heart & Lung Centre, Wolverhampton	Mar 11 to Feb 12
Trust Fellow	New Cross Hospital, Wolverhampton	Mar 10 to Feb 11
Cardiac Fellow	Heart & Lung Centre, Wolverhampton	Mar 09 to Mar 10
Asst Professor	Christian Medical College, Vellore	Jun 04 – Feb 09
Senior Registrar	Lakeshore Hospital and Research centre, Kochi, India.	Feb 03– May 04
Senior Registrar	Maulana Azad Medical College, New Delhi	Jun 02 – Feb 03
Registrar	Maulana Azad Medical College, New Delhi	May 99 – Apr 02
SHO	Ernakulam medical center	Jan 98 – Apr 99
PRHO	Medical College Trivandrum	Jan 97 – Dec 97

### **DETAILS OF THE PRESENT JOB**

#### **Professor of Anesthesia and Head of Cardiac Anesthesia**

I was appointed as the acting head of Anesthesia Unit 4, from Jun 2013. I am in charge of three cardiothoracic ORs, which do about 1300 cases per year, which include 700 adult cardiac surgeries, 300 congenital heart surgeries and 300 thoracic surgeries. We cover cardiac surgical intensive care, which is a 15-bedded ICU. We are involved in the management of diagnostic catheterizations, device closures, cardiac electrophysiology endovascular procedures and primary PCI. We do therapeutic whole Lung Lavage and Airway stenting with the Pulmonary Medicine Unit. We do ENT cases of all complexities including laryngectomies, tracheal reconstruction, cochlear implants and hypotensive anesthesia.

I have a special interest in difficult airway and do open airway technique (TIVA with out ETT for dynamic assessment of pediatric airway, laryngeal papillomas and LASER debulking in adults). My other area of interest is central airway obstructions.

We have started Ultra Fast Tracking in Paediatric Cardiac surgery in Christian Medical College Vellore, using Ultrasound Guided Paravertebral Block and presented our data during IACTA 2013.

We do an interventional pulmonology program which deals with central airway obstructions.

We have initiated TAVI program in CMC Vellore.

We run a TNMGR Medical University accredited Post Doctoral Fellowship in Cardiac Anesthesia. We have two candidates every year doing a one-year program. We also give cardiac anesthesia exposure and training to residents from NIMHANS Bangalore, Bangalore Baptist hospital for a duration of one month. The WFSA pediatric anesthesia trainees are given exposure to pediatric cardiac and pediatric ENT in our unit.

I was actively involved in the organization and conduct of a cadaveric regional workshop, difficult airway workshop and a ultrasound guided regional anesthesia workshop.

My other academic activities include guiding postgraduate registrars for research. I do one in six on call as a senior consultant, and provide direct and indirect supervision to the on call team. Apart from this, I am involved in the operating room teaching of postgraduate and undergraduate students. I also conduct clinical case discussions and lectures for postgraduates. I have introduced the concept of “competency based training” and “appraisal” into the residents training in the department.

### ***PUBLICATIONS***

1. Usefulness of ultrasound guided measurement of minimal transverse diameter of subglottic airway in determining the endotracheal tube size in children with congenital heart disease: A prospective observational study. Rahul Pillai, Suresh Kumaran, L Jeyasheelan, Sajan P George, Raj Sahajanandan. *Annals of Cardiac Anesthesia* Vol 21(4) 382 -387
2. A randomized control trial comparing the myocardial protective effects of isoflurane with Propofol in patients undergoing elective coronary artery bypass surgery on cardiopulmonary bypass, assessed by changes in N terminal brain natriuretic peptide. Balaji Kuppaswamy, Kirubakaran Davis, Raj Sahajanandan, Manickam Ponniah. *Annals of cardiac Anesthesia*, vol 21(1) Jan March 2018: 34 - 40.
3. Lutembacher syndrome: Dilemma of doing a tricuspid annuloplasty. AV Varsha, Gladdy George, Raj Sahajanandan. *Ann Card Anesth* 2017. Vol 20(4) 456.
4. Low-dose succinylcholine to facilitate laryngeal mask airway insertion: A comparison of two doses. Leah R George, Raj Sahajanandan, Sarah Ninan. *Anesthesia essays and researches* 2017.
5. Inverted left atrial appendage masquerading as a left atrial mass. Suresh Kumaran, Gladdy George, A V Varsha, Raj Sahajanandan. *Ann Card Anaesth* 2017 Apr-Jun;20(2):248-249
6. An innovative way to reinsert dislodged Arndt blocker using urological glide wire by Pillai Rahul, Ancheri Sneha, Dharmalingam Sathish, Sahajanandan, Raj *Annals of Cardiac Anaesthesia*. April-June, 2016, Vol. 19 Issue 2, 354

7. Wire guided fiberoptic retrograde intubation in a case of glottic mass. Dhanyee, Anity, Pillai Rahul, Sahajanandan, Raj. Indian Journal of Anaesthesia. March 2016, Vol. 60 Issue 3, 219
8. Case report of aortopulmonary window with undiagnosed interrupted aortic arch: Role of transesophageal echocardiography. Dharmalingam Sathish, Pillai Rahul, Karupppiah Sathappan, Sahajanandan Raj, George Gladdy. Annals of Cardiac Anaesthesia. Jan-March, 2016, Vol. 19 Issue 1, 152
9. Externalized guide wires to facilitate fenestrated endograft deployment in the aortic arch. G Joseph, P Premkumar, VS Thompson, M Varghese, D Selvaraj, R Sahajanandan. Journal of Endovascular therapy 2015: 1-12.
10. Role of transoesophageal echocardiography in peri-operative management of cardiac hydatid cyst. Sathappan Karupppiah, Satishkumar Dharmalingam, Raj Sahajanandan, Gladdy George. Indian J Anaesthesia 2015: 59 (11); 753 -54.
11. The role of point-of-care assessment of platelet function in predicting postoperative bleeding and transfusion requirements after coronary artery bypass grafting. P K Mishra, J Thekkudan, Raj Sahajanandan, M Gravenor, S Lakshmanan, K M Fayaz, H Luckraz. Annals of cardiac anaesthesia 2015: Vol 18 (1) : 45 -51
12. Intraoperative transesophageal echocardiography assessment of right atrial myxoma resulting in a change of the surgical plan. S.K Dharmalingam, Raj Sahajanandan. Annals of cardiac anaesthesia 2014: Vol 17 (4): 306-8.
13. Carcinoid heart disease secondary to ovarian tumour: a logical sequence of management? Raj Sahajanandan, S Lakshmanan, S Hester, M Norrell, P Strouhal, D Murphy, H Buch, J S Billing. SAJAA 2013; 19 (4): 224-26.
14. Review Article: Regional anesthesia in patients with pregnancy induced hypertension. Saravanan P Ankichetty, Ki Jinn Chin, Vincent W Chan, Raj Sahajanandan, Hungling Tan, Anju Grewal, Anahi Perlas . J Anaesth Clin Pharmacol 2013; 29(4): 435 - 444.
15. Case report: Raj Sahajanandan, Saravanan PA, P Manickam. Post burn contracture neck with extreme microstomia and fibrosed obliterated nose – A unique airway challenge. J Anaesth Clin Pharmacol 2010; 26(2): 267 -269.
16. Case report: Saravanan. P.A, R. Jacob, Raj. Sahajanandan, Anita .S. Joselyn. Paediatric Auto renal transplantation – Anaesthetic Challenge. Indian Journal of Anaesthesia 2009; 59(3): 227-229
17. Case report: M.Korula, SaravananPA Raj Sahajanandan. Post intubation stridor. J Anaesth Clin Pharmacol 2009; 25(2): 221-222.
18. Case report: M. Ramamani, S.Raj, P. Manickam. Anaesthesia for tracheo-bronchial stenting. A report of two cases. Indian journal of Anaesthesia.2008, Apr (52): 211- 213.
19. Case report: Preeta J, Raj. S, Kartikeyan, Tony.T. C. Asystole following profound vagal stimulation during Hepatectomy. Indian Journal of Anesthesia.2008 Feb (52): 81-83.

20. Raj.S, Preeta J. Paediatric post anesthesia care unit. In: Rebecca J. Editor. Understanding Paediatric Anesthesia. 2<sup>nd</sup> edition. BI publications; 2008 (13) p 126-135.
21. Raj.S, Rebecca J. Neonatal Surgical Emergencies. In: Rebecca J. Editor. Understanding Paediatric Anesthesia. 2<sup>nd</sup> edition. BI publications; 2008 (6) p 60-70.
22. Raj.S, Preeta J. Recovery and Discharge of Day Care Surgical Patients. Christian Medical College Alumni Journal.2008 May 42(1): 22-26.
23. G. Senthil, S. Raj, JS Dali, R. Anand, C.K. Dua. Comparative Evaluation of preoperative intravenous Dexamethasone and Ondansetron on PONV after Laparoscopic Colectomy, American Society of Anesthesiology Abstracts. A – 32, 2000, San Francisco, Oct 14 -18, USA.
24. Case Report: Raj S, G. Singh, P. Manickam. Anesthesia for Lung Volume Reduction Surgery in a case of bilateral bullous lung disease. Indian Journal of Anaesthesia, 2008; 52 (5): 589 - 92.

### **Examiner**

*National Board of Examinations  
TN MGR Medical University (MD,DA)  
Kerala University of Health Sciences(MD, DA)  
JIPMER ( Post doctoral fellowship)*

### **Reviewer**

Annals of cardiac anesthesia  
Journal of Anesthesiology and Clinical Pharmacology

### **Presentations**

1. Obesity and one lung ventilation. Changing concepts. ASOCON Ahmedabad 2019
2. Simulation in Pediatric ENT surgery. 4<sup>th</sup> international pediatric ENT conference CMC Vellore 2019
3. Faculty CAAP Kozhikode. Anesthesia for obesity surgery Jan 2019
4. Hemorrhage in cardiac surgery. Are there algorithms which help or only coagulation screen? TRANSMEDCON Kochi 2018
5. Panel Discussion – SAVR vs TAVR. IACTA Chennai 2018
6. Preoperative assessment for lung resection TACE 2018, Vellore
7. Panel Discussion- Unanticipated difficult airway. MASCON, Mumbai 2018
8. Anesthesia for interventional pulmonology- An evolving challenge. MASCON, Mumbai 2018
9. How I do a papilloma excision in a child without ET Tube, MASCON, Mumbai 2018
10. Undiagnosed cardiomyopathy -Anesthetists nightmare, MASCON, Mumbai 2018
11. Anatomy of Difficult airway, MASCON, Mumbai 2018
12. Interpretation of preop ECHO. CP Bypass simulation Cardiac Anesthesia update, CMC Vellore

13. Faculty Difficult airway workshop. IAPA Pediatric Anesthesia CMC Vellore
14. Aortic Stenosis TEE. 3<sup>rd</sup> International TEE workshop NH Bangalore 2018
15. Lung Isolation techniques SAAMCON, St. Jones Bangalore 2018
16. Panel discussion on Difficult airway guidelines SAAMCON 2018
17. Interpretation of preoperative ECHO, ISA TN Coimbatore 2018.
18. Jet ventilation for airway surgery. Kidwai Cancer center, Bangalore 2018
19. Panel discussion – Anesthesia for head and neck cancer Kidwai, July 2018.
20. ECHO in ICU Narayana Hrudayalaya. Heamodynamic & ECMO workshop July 2018.
21. Factor concentrates Help or Harm? 2nd National Symposium on Cardiac Surgical Critical Care, MMM June 2018
22. Intricacies of anesthesia in a stridulous child. Pediatric ENT 2018. Simulation – subglottic stenosis, FB bronchus
23. On the spot difficult case discussion. Thoracic anesthesia workshop coordinator. Airway 2018 Delhi
24. Pediatric Lung isolation IAPA Hyderabad 2018
25. Anesthesia for VATS. IACTA 2018, Hyderabad.
26. Central Airway Obstruction – Aesthetic challenges, Impact Vista 2018, Trivandrum
27. Lung Isolation techniques workshop Impact Vista 2018, workshop
28. Lung Isolation techniques, Raaonline, Chennai 2017.
29. Knobology and image optimization Raaonline Chennai 2017
30. Central airway obstruction ISACON 2017
31. Lung isolation and difficult airway ISACON 2017
32. Lung resection in a patient with marginal lung function, IACTA Chennai Update Nov 2017
33. TEE of thoracic Aorta. 2<sup>nd</sup> International TEE workshop NH Bangalore 2017
34. Lung isolation in difficult airway. Thoracic anesthesia update, JIPMER 2017
35. Anesthesia for interventional Pulmonology, Bronchocon 2017
36. Workshop faculty – Live Demo, Interventional Pulmonology, Bronchocon 2017
37. IACTA Difficult airway – Lung Isolation, Tips & Traps IACTA 2017, Pune
38. 3<sup>rd</sup> Perioperative Echocardiography, CMC Vellore. TEE for mitral regurgitation 2017, Vellore
39. Pediatric lung isolation: AAPC Thoracic anesthesia Update, Mumbai 2017
40. Panel discussion: Ventilation strategies in OLV. Moderator. AAPC Thoracic anesthesia Update, Mumbai 2017
41. Update on Lung Isolation techniques: ISA Ludhiana 2016
42. TRALI & TACO. 1<sup>st</sup> National Symposium on Cardiac Surgical Critical Care, Madras Medical Mission, Chennai, 2016
43. Interpretation of PFT. Ether Day CME, Stanley Medical College, Chennai 2016
44. Faculty APGAP 2016, Manipal. Pediatric lung Isolation, anesthesia for low cardiac output for non cardiac surgery.
45. Faculty International TEE workshop Narayana Hrudayalaya, 2016. Bangalore.
46. Faculty IACTA 2016, Chennai. Thoracic Anesthesia workshop.

47. Faculty Airway management foundation, New Delhi 2016. Lung isolation techniques
48. Faculty Thoracic anesthesia update (AAPC Mumbai) 2016. Anterior mediastinal masses. Hypoxia during one lung ventilation.
49. Faculty IAPA Vellore 2016. Difficult pediatric airway.
50. Faculty IAPA 2016, Vellore. Pediatric difficult airway
51. Faculty Difficult Airway ISACON 2015, Jaipur.
52. Faculty Thoracic Anesthesia workshop, TMC Difficult Airway conference, Mumbai 2015
53. Organized Quiz for PONCON 2015.
54. Faculty TRISZAC 2015. Pediatric regional anesthesia beyond caudal.
55. Faculty. Ultrasound of the airway. Hillcon 2015.
56. Faculty & Organizing Secretary Thoracic Anesthesia Vellore 2015. Hypoxia during one lung ventilation. Difficult case scenarios in one lung ventilation. Panel discussion. Anterior mediastinal mass.
57. Faculty IACTS Thoracic surgery update Vellore 2014. Anesthesia for thoracic surgery.
58. Faculty Lung Isolation Techniques workshop. Management of Hypoxia during one lung ventilation. NAC Mumbai 2014
59. Faculty Lung Isolation techniques workshop, Airway Management Foundation 2014
60. USGRA and Cadaveric Anatomy workshop 2014, CMC Vellore
61. Faculty National Perioperative TEE, Narayana Hrudayalaya 2014
62. Perioperative Echo 2014, CMC Vellore
63. Faculty JSS CME Mysore. Lung Isolation Techniques. Anesthesia concerns for Central Airway Obstructions. June 2014
64. Free paper IACTA 2014, Mumbai Feb 2014
65. Faculty All India Difficult airway society meet Tata Memorial Mumbai Dec 2013.
66. Faculty Hemodynamic workshop. TEE in noncardiac surgery Pondicherry 2013
67. Faculty - Pro Con session. EEG based depth of Anesthesia monitors prevent awareness during anaesthesia. PONSZAC2013, Pondicherry.
68. Free Paper Judge - IACTA Kochi 2012
69. Faculty & Organizing Secretary Lung Isolation Techniques, CMC Vellore - 2012
70. Faculty & Organizing Secretary Perioperative Echocardiography, CMC Vellore - 2012
71. Faculty - ISACON 2012, Indore. Pro Con session. OSA patients undergoing surgery as Day Case
72. Faculty –Ultrasound Guided Regional Anesthesia, Indo UK Pain Conference, Agra 2012.
73. CICU Readmission, IACTA 2012 New Delhi ( 2<sup>nd</sup> price for best free paper)
74. TAVI –A New Cross Experience, IACTA 2012 New Delhi
75. Faculty for Lung Isolation DLT & beyond, The Royal Wolverhampton hospitals, UK

76. Faculty lecture on “General Anesthesia for Ophthalmology” at All India Ophthalmic Society national conference, Feb 2008, Vydehi Institute, Bangalore.
77. Was invited to present a POSTER-DISCUSSION on “Comparative evaluation of the influence of i.v dexamethasone and ondansetron on prevention of postoperative nausea and vomiting after laparoscopic cholecystectomy”, at the Annual Meeting of the ASA, Oct 2000, San Francisco, California.
78. Presented a POSTER DISCUSSION on the same topic at the Annual Meeting of ISA, Dec 2002, Coimbatore, India.
79. Presented a poster discussion on the management of a case of post extubation stridor, at the 5<sup>th</sup> ASPA, International conference of Paediatric Anesthetists, 2006, Vellore.
80. Faculty, regional Anesthesia cadaveric workshop, RSACP workshop, CMC Vellore.
81. 1<sup>st</sup> prize in the Pediatric Anesthesia quiz, 5<sup>th</sup> ASPA conference, Vellore, 2006.

#### **ADMINISTRATIVE AND TEACHING EXPERIENCE**

- In charge of Academics and training for residents
- Organizes cadaveric (regional anesthesia) work shop at CMC Vellore.
- Organizes Difficult airway workshop at CMC Vellore.
- Organizes USGRA workshop at CMC
- Organizes perioperative echo workshop at CMC Vellore
- Organizes thoracic anesthesia workshops at CMC Vellore