

# Curriculum Vitae

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## Education

11/1975 - 01/1981 M.B.B.S. in Medicine from University of Gauhati, Assam, India

## Training

02/1981 - 03/1982 Internship in Rotating Clinical from Gauhati Medical College Hospital, Assam, India  
08/1984 - 04/1989 Residency in Anesthesiology from University of Manchester Hospitals and Durham County Hospital System, United Kingdom  
03/1991 - 03/1992 Fellowship in Neuro/Spine Anesthesia from University of Louisville, Louisville, Kentucky  
07/1992 - 06/1993 Fellowship in Pain Management from Vanderbilt University Pain Control Center, Nashville, Tennessee

## Licensure and Certification

12/1985 - Present Medical, D.A. (U.K.) Diploma in anesthetics United Kingdom  
12/1988 - Present Medical, FFARCS (1) Fellow of the Faculty Ireland  
01/1990 - 01/1990 Medical, Education Commission for Foreign Medical Graduates  
12/1990 - 12/1990 Medical, Federal Licensure Examination  
09/1994 - Present Medical, Tennessee Medical License of Tennessee United States  
1995 - Present Medical, American Board of Anesthesiology  
1996 - 2006 Medical, Pain Management Certification by ABA

## Academic Appointments

09/1994 - 11/2004 Assistant Professor, Vanderbilt University (Nashville, Tennessee)  
09/1994 - 12/2004 Assistant Professor, Anesthesiology, Vanderbilt University Medical Center (Nashville, Tennessee)  
11/2004 - 06/2008 Associate Professor of Clinical, Vanderbilt University (Nashville, Tennessee)  
01/2005 - Present Associate Clinical Professor, Anesthesiology, Vanderbilt University Medical Center (Nashville, Tennessee)  
07/2008 - Present Associate Professor of Clinical Anesthesiology, Vanderbilt University (Nashville, Tennessee)  
10/2008 - 06/2014 Interim Division Director & Medical Director, Neuroanesthesia, Anesthesiology, Vanderbilt University Medical Center (Nashville, Tennessee)

## Hospital Appointments

09/1994 - Present Staff Anesthesiologist, Anesthesiology, Vanderbilt University Medical Center (Nashville, Tennessee)  
09/2013 - Present Clinical Director, Division of Neuroanesthesia, Anesthesiology, Vanderbilt University (Nashville, Tennessee)

## Other Work Experience

1996 - 1999 Anesthesia Attending in Charge VUMC Main Operating Rooms, Anesthesiology, Vanderbilt University Medical Center (Nashville, Tennessee)

## Professional Organizations

American Society of Anesthesiologists  
Tennessee Society of Anesthesiologists

2013 International Anesthesia research Society  
 Society of Neurosurgical Anesthesia and Critical Care  
 Association of Clinical Directors- AACD

## Professional Activities

### Intramural

1996 - Present	Clinical Competency Committee, Anesthesiology
1996 - 1998	Blood Bank Committee, Anesthesiology
2006 - Present	Resident Selection Committee, Anesthesiology
2006 - 2009	AIC- Anesthesia attending in charge, Anesthesiology, As Anesthesia attending in charge of Main operating rooms in VUMC, I made daily assignments of anesthesia faculty, residents and other providers. Managed the VOR board
07/2006 - 07/2008	Morbidity & Mortality Co- Director, Anesthesiology, Selected appropriate perioperative cases to be presented at the M&M meeting and Co-ordinated & directed the monthly meetings.
10/2014 - Present	Pressure Ulcer Prevention Task Force, VUMC Hospital, I serve on this committee who assesses perioperative hospital acquired pressure ulcers. We meet twice a month to discuss strategies to evaluate HAPU and design strategies to prevent them., Member
2015 - Present	Neurosurgery Infection control Task Force, Neurological Surgery, Meet once a month to identify cases of SSI and tease out causes and find solution, Anesthesia Lead, Liaison
09/2015 - Present	Promotion Advisor- CCC, Anesthesiology, As promotion advisor I review evaluations and scores and monitor progress of 7 anesthesia residents and report to CCC committee.
12/2016 - Present	Complex Spine Board, Anesthesiology, This committee meets once a month and discusses patients with significant co morbid conditions contemplating Complex Spine surgery., Anesthesiology Lead

### Extramural

02/2016 - Present	Reviewer for J of Medical Systems
03/2016 - Present	Education Committee, SNACC- Society of Neurosciences in Anesthesia and Critical Care, As a member of the PBLD committee on SNACC, I'll be coordinating, reviewing and writing PBLDs for SNACC, PBLD author and reviewer
10/2016 - Present	Anesthesia Special Interest group, SNACC- Society of Neurosciences and Critical Care, Identify opportunities to promote the academic mission of anesthesiology as a specialty and promote education of medical students , residents and fellows., Member

## Teaching Activities

N/A	Anesthesia for Epilepsy surgery, Lecturer
N/A	Anesthesia for Neurovascular Surgery, Lecturer
N/A	Mock Oral Board Examiner for VUMC Anesthesia Residents, Examiner
N/A	critical Skills Course: VUSM III, Faculty, 2007,2008,2009,2010, Feb 2011
N/A	Malignant Hyperthermia, Lecturer
N/A	Anesthesia for Pituitary Surgery, Lecturer, 2301 VUH, I give this lecture once a month to residents rotating through Neuroanesthesia
2008	Intravenous Induction Agents
2009	Management of Traumatic Brain injury, Lecturer
2011	Anesthesia Circuits, Faculty Mentor, Anesthesia Circuits
1996 - 2011	Positioning and associated Risks, Faculty, Lecture scheduled for 6/17/11
10/2002 - 10/2002	Mastocytosis and Anesthesia, Lecturer
2005 - Present	Airway Course, Instructor, VUMC
2006 - 2011	Anesthesia and Critical Skills Simulator, Faculty, CELA, CA 3 residents simulation
2007 - Present	Resident Morning Conference, Faculty Facilitator
02/2008 - 2010	Journal Club for Neuroanesthesia Division, Facilitator
09/2011 - 09/2011	Faculty Lead
10/2011 - 10/2011	Anesthesia for Pituitary, Faculty Supervisor
10/2011 - 10/2011	Faculty Lead, Sim center
11/2011 - 11/2011	Surfactant, Faculty lead

11/2011 - 11/2011	Traumatic Brain injury, Faculty lead, 2301 TVC
12/2011 - 10/2011	Examiner, Light Hall Sim center
12/2011 - 12/2011	Endoscopic Neurosurgery, Faculty lead, 2301 TVC
02/2012 - 10/2012	Anesthesia for Pituitary, Faculty Lead, 2301 TVC
03/2012 - 03/2012	OSA- Evidence Based Anesthesia, Faculty Lead
03/2012 - 10/2012	Anesthesia for Functional NSGY, Faculty Lead
04/2012 - 04/2012	Normothermia- Evidence based Anesthesia, Faculty Lead, 2301 TVC
04/2012 - 04/2012	Introduction to Neuroanesthesia, Faculty Lead
04/2012 - 04/2012	Faculty Lead, Sim Center
05/2012 - 05/2012	Anesthesia for Functional NSGY, Faculty Lead
05/2012 - 05/2012	Introduction to Neuro and Monroe- Kelly, Faculty Lead
06/2012 - 06/2012	Intro to Anesthesia, Faculty
06/2012 - 06/2012	Positioning during Surgery, Faculty, 2301 & OR
10/2014 - 10/2014	Anesthesia for Functional Neurosurgery, Faculty Mentor, 4648 TVC, As part of morning didactics for residents rotating thru neuroanesthesia. Mentor the resident and make available current literature to the resident presenting.
11/2014 - 2014	Bradycardia after SAB, TRALI,: Emergencies in the OR, Instructor, Simulation Center -Light Hall, As instructor I run the OR case scenario and provide feedback to the residents once the simulation is over.
06/2015 - 06/2015	Positioning and associated Complications, Faculty lecture for 1 hour, 2301-Resident Library, Class room lecture for 40 min followed by 20 min of hands on demonstration in the OR
06/2015 - 06/2015	Airway and Central Line placement: Intern Boot Camp, Faculty, Simulation Center- Light Hall, Instructor for Airway management and Central line placement for Interns in Anesthesia and surgery- 8 hours

## Research Supervision / Mentorship

07/2012 - Present	Shannon Stough, M.D. VUMC, Current Position: Resident. (Resident, General Mentorship)
06/2013 - Present	Jeanette Hansen, M.D. VUMC, Current Position: PGY-3 Resident. (Faculty, General Mentorship)

## Other Significant Activities

N/A	Curriculum and Course Development: Developed Curriculum for Neuroanesthesia rotation for Residents Developed Live Performance Competency Assessment (LPCA) for Craniotomy for residents rotating through Neuroanesthesia
N/A	Resident/Student Mentoring: Faculty Advisor/ Mentor for Anesthesia residents
2002	Resident/ Student Mentoring: Minority Medical Education Program Mentor (MMEP) 1999-2002
03/2015	Poster Moderator: Poster Moderator - IARS Annual Meeting, Honolulu, HI- March 2015
10/2015	Poster Moderator-ASA- American Society of Anesthesiologists: Research Poster Moderator- Moderate Poster sessions on Clinically Challenging Cases
03/2016	Research Abstract Reviewer- IARS: Review research abstracts submitted to IARS and grade the abstracts
04/2016	Book Chapter- Up to Date : Anesthetic Considerations in Patients with Chronic Spinal Cord Injury- Accepted

## Publications

### Peer Reviewed Publications

#### Case Reports

1. Greenin, Mathews, Blair. Apparent Dexmedetomidine Induced Diabetes Insipidus. *Anesthesia & Analgesia* 2011 Dec;113(6):1381-1383.

#### Research Articles

1. **Mathews, Letha;** Kla, Koffi M.; Marolen, Khensani N.; Sandberg, Warren S.; Ehrenfeld, Jesse M. Measuring and Improving First Case On-Time Starts and Analysis of Factors Predicting Delay in Neurosurgical Operating Rooms. *Journal of Neurosurgical anesthesiology* 2015 Jul;27(3):203-207.

## Non-Peer Reviewed Publications

### Research Articles

1. WCV Parris, PK Janicki, L Mathews, BW Johnson. Persistent pain and increased ratio of plasma Morphine-3 Glucuronide of Morphine-6-Glucuronide associated with long term intrathecal morphine administration. . *Journal of Pain, Symptom Management* (Submitted).
2. WCV Parris, PK Janicki, BW Johnson, L Mathews. Pulsating magnetic field therapy (PMFT) induced hypoalgesia is associated with the increased levels of Dynorphin A 1-8 in the brain and spinal cord of the rat model of painful peripheral mononeuropathy. *Abstracts of the 1993 Annual ASA Meeting, Washington DC, Anesthesiology, 1993, 79 (Suppl. 3A) A857.* 1993.
3. WCV Parris, PK Janicki, BW Johnson, L Mathews. Brain, spinal cord, and plasma levels of substance P (SP), met-enkephalin (ME) and dynorphin A 1-8 (DYN) in rat model of chronic neuropathic pain. *Abstracts of the 47th Postgraduate Assembly Meeting of the New York Society of Anesthesiologists, New York, Dec. 11-15, 1993, P9049.* 1993.
4. WCV Parris, PK Janicki, BW Johnson, L Mathews. The effect of pulsating magnetic field (PMF) and infrared diode laser (IRL) treatment on substance P (SP), met-enkephalin (ME) and dynorphin A 1-9 (DYN) in the spinal cord and brain in the rat model of painful peripheral mononeuropathy. *Abstracts of the 12th Annual Scientific Meeting of the American Pain Society, Nov. 4-7, 1993, Orlando, Florida P93559.* 1993.
5. WCV Parris, PK Janicki, BW Johnson, L Mathews. Infrared laser diode irradiation has no behavioral and biochemical effect on pain in the chronic mononeuropathy produced by sciatic nerve ligation in rat. *Abstracts of 1993 Annual ASA Meeting, Washington DC, Anesthesiology, 1993, 79 (Suppl. 3A), A861.* 1993.
6. WCV Parris, PK Janicki, BW Johnson, L Mathews, JL Horn:. Ketorolac tromethamine produces analgesia after intrathecal administration in rat model of chronic neuropathic pain. *Abstracts of 19th Annual Meeting of American Society of Regional Anesthesia, Chicago, Illinois, Apr. 7-10. 1994.* 1994.
7. Parris WC, Janicki PK, Johnson BW Jr, **Mathews L.** Infrared laser diode irradiation has no behavioral or biochemical effect on pain in the sciatic nerve ligation-induced mononeuropathy in rat. *Anesthesia progress* 1994; 41(4):95-9. PMID: 8934959 PMID: PMC2148839.
8. Parris WC, Janicki PK, Johnson B Jr, Livengood J, **Mathews L.** Persistent pain associated with long-term intrathecal morphine administration. *Southern medical journal* 1996 Apr;89(4):417-9. PMID: 8614885.
9. Turner S, **Mathews L,** Pandharipande P, Thompson R. Dolasetron-induced torsades de pointes. *Journal of clinical anesthesia* 2007 Dec;19(8):622-5. PMID: 18083478.

### Book Chapters

1. **Mathews L.** Anesthesia for Awake craniotomy. In *Essence of Anesthesia.* 2009.
2. **Mathews L,** Lee L.A. Anesthesia for patients with Acute with Spinal Cord injury. Up to Date. 2016 Jun.
3. Lee, L.A; **Mathews L.** Anesthesia for patients with Chronic Spinal Cord Injury. 2016 Oct.

### Abstracts

1. Meredith Herzog, Letha Mathews. Severe Electrolyte Abnormalities Secondary to Unrecognized Ectopic ACTH Secretion in Skull Base Esthesioneuroblastoma. 2015.

### Research Papers

1. Zuckerman SL, Forbes JA, Mistry AM, Krishnamoorthi H, Weaver S, Mathews M, Cheng JS, McGirt MJ. Electrophysiologic deterioration in surgery for thoracic disc herniation: impact of mean arterial pressures on surgical outcome. . *Eur Spine J.* 2014 Nov;23(11):2279-2290. PMID: 24898311.

## Presentations

### Presentations at Scientific Meetings

1. WCV Parris, PK Janicki, BW Johnson, L Mathews. 7th Congress of Pain. IASP; Paris, France. 1993 Aug; Pulsating magnetic therapy (PMT) attenuates hyperalgesia in rat model of neuropathic pain.
2. WCV Parris, PK Janicki, BW Johnson, L Mathews, JL Horn. Annual Meeting of American Society of Regional Anesthesia. American Society of Regional Anesthesia; Chicago, Illinois. 1994 Apr; Ketorolac tromethamine produces analgesia after intrathecal administration in rat model of chronic neuropathic pain.
3. C. Hughes, Letha Mathews, L.J Easdown, James.L. Blair. ASA Annual meeting. ASA; 2008 Sep; Use of McGrath VideoLaryngoscope in patients with C-spine disease.

4. Sheena Weaver, 1st Author, Letha Mathews, Senior Author. SNACC Annual Meeting. SNACC; Chicago, Illinois. 2016 Oct 21; Reducing Hospital Acquired conditions: A quality Improvement Journey in Perioperative Neurosurgical Pressure Ulcer prevention.

#### **Problem based learning discussion**

1. ASA Annual meeting. ASA; Chicago, Illinois. 2011 Oct; Anesthesia for Deep Brain Stimulation. It's just a MAC case!!!.
2. Letha Mathews M.D. IARS Annual Meeting. IARS; Honolulu, Hawaii. 2015 Mar 24; Transsphenoidal Resection of Pituitary Tumors and Anesthetic Implications for Patients with Cushing's Disease.
3. Letha Mathews. American Society of Anesthesiologists Annual Meeting. ASA; San Diego, California. 2015 Oct 24; Awake Craniotomy in a Patient with Obstructive Sleep Apnea.

#### **Medically Challenging Cases**

1. McKay Bateman; Letha Mathews. ASA Annual Meeting. ASA; 2008 Oct; Thalamic Storm following Endoscopic Brain Surgery.
2. Allison Greening, Letha Mathews, James L Blair. ASA Annual meeting. ASA; 2010 Oct; Apparent Dexmedetomidine Induced Diabetes Insipidus.

#### **Other**

1. L. Mathews, M. Bateman. ASA Annual Meeting. 2008 Oct; Thalamic Storm following Endoscopic Brain Surgery.
2. Allison Greening, Letha Mathews, James Blair. ASA Annual Meeting. 2010 Oct; Apparent Dexmedetomidine Induced Diabetes Insipidus.
3. Mathews L, Kla K.M, Smithson K.G. ASA Annual Meeting. Washington, District of Columbia. 2012; Predictors of Delayed First Case Starts in Neurosurgical Operating Rooms.
4. Kla K.M, Mathews L, Marolen K.N, Ehrenfeld J.M,. Society for Neuroscience in Anesthesiology and Critical Care. Washington, District of Columbia. 2012 Oct; Measuring and Improve First Case On-Time Starts.
5. Elizabeth Embury, MD, Letha Mathews, MD. ASA Annual Meeting. San Francisco, California. 2013; Recurrent Postoperative Stridor following EpEpendymoma resection.
6. Letha Mathews, MD, Koffi Kla, MA, Kenneth Smithson, DO. SNACC Annual Conference. San Francisco, California. 2013 Oct; Perioperative Management Practices for Neurosurgical procedures in sitting position in patients with Patent Foramen Ovale.
7. Candi Haggard, RN, Joselito Tiamson, BSN RN, Letha Mathews, MD of Anesthesiology, James Blair, DO. Journal of Wound Ostomy and Continence Nursing WOCN(R) Society's 46th Annual Conference. Nashville, Tennessee. 2014 Jun 21; Preventing Pressure Ulcer in the Prone Perioperative Patient.

#### **Workshop**

1. Letha Mathews & Sheena Weaver. Nashville, Tennessee. 2015 Feb 11; Park bench Positioning Work Shop.

#### **Internal Grand Rounds**

1. Letha Mathews, Sheena Weaver, Susan Hodgins. Quarterly Morbidity and Mortality Meeting - Perioperative Services. Perioperative Services; Nashville, Tennessee. 2015 Jun 6; Perioperative Pressure Ulcers.