# **Curriculum Vitae**

Name: Nimesh P. Patel

Office Address: 1211 21st Ave. South Suite 401 Nashville Tennessee, 37212

Work Email: nimesh.patel@Vanderbilt.Edu

### **Education**

1990	B.S. in Biomedical Engineering from Vanderbilt University, Nashville, TN
1990	B.E. in Electrical Engineering from Vanderbilt University, Nashville, TN
1994	M.S. in Biomedical Engineering from Vanderbilt University, Nashville, TN

## **Academic Appointments**

09/1994 - 09/1995	Assistant, Vanderbilt University (Nashville, Tennessee)
07/1995 - 06/2008	Assistant, Vanderbilt University (Nashville, Tennessee)
07/2008 - 10/2009	Assistant in Anesthesiology, Vanderbilt University (Nashville, Tennessee)
10/2009 - Present	Associate in Anesthesiology, Vanderbilt University (Nashville, Tennessee)

## **Other Work Experience**

06/1996 - 12/1997	VPIMS Project Leader, Vanderbilt University Medical Center, Vanderbilt University Medical Center (Nashville, Tennessee)
01/1998 - 06/1999	Director, Informatics and Computing, Department of Anesthesiology, Vanderbilt University Medical Center (Nashville, Tennessee)
07/1999 - Present	Director, Perioperative Informatics and Computing, Departments of Anesthesiology and Operative Services, Vanderbilt University Medical Center (Nashville, Tennessee)

## **Publications**

#### **Non-Peer Reviewed Publications**

## **Abstracts**

- 1. **Patel N**, Hyman S, King PH, Hersey S. Calculating Cerebral Blood Flow Using the Fick Principle. <u>International Journal of Clinical Monitoring and Computing</u> 1991; 8(2):143-144.
- 2. King PH, Jones M, Higgins M, Beattie C, **Patel N**. Computerization of the Preoperative Patient Assessment. <u>International Journal of Clinical Monitoring and Computing</u> 1996 May;13(2).
- 3. St. Jacques PJ, **Patel N**, Higgins MS. Improving anesthesiologist performance through profiling and incentives. <u>Journal of Clinical Anesthesia</u> 2004; 16:523-528.
- 4. St. Jacques P, Sanders N, **Patel N**, Talbot TR, Deshpande JK, Higgins M. Improving timely surgical antibiotic prophylaxis redosing administration using computerized record prompts. <u>Surgical Infections</u> 2005; 6(2).
- 5. St Jacques P., Patel N., Higgins M. On Time Incentives for Anesthesiologists. OR Manager 2005 Apr;21(4).
- Paul J. St. Jacques, M.D., Nimesh Patel, M.A., Michael S. Higgins, M.D., M.P.H. Effect of an Automated Antibiotic Prompt as Part of an Integrated Perioperative Informatics System. <u>Anesthesiology</u> 2006; 105:A1381-A1381.
- 7. St Jacques P, **Patel N**, France D, Deshpande J, Higgins MS. Use of computer prompts improves compliance with redosing of perioperative prophylactic antibiotics. <u>Telemedicine and E-Health Journal</u> 2006 Dec.
- 8. Brian Rothman, MD, Nimesh Patel, MA, Paul J St. Jacques, MD. An Electronic Patient Information Display Can Replace Traditional Handwritten OR Whiteboards. <u>Anesthesia and Analgesia</u> 2008; 106:S-18-S-18.

#### **Conference Proceedings**

- 1. **Patel NP**, Hollingsworth JA. Database Applications in Anesthesiology. Proceedings Computers in Anesthesia XIV. 1993 Oct; Williamsburg, VA.
- 2. Flanagan JF, **Patel NP**, King PH, Smith BE. Respiratory Monitoring in the Post-Operative Patient Receiving Post-Operative Epidural Narcotics. 68th Clinical and Scientific Congress of the International Anesthesia Research Society. 1994 Mar;Orlando, FL.
- 3. Flanagan JF, **Patel NP**, King PH, Smith BE. Automated End-Tidal CO2 Monitoring in the Postoperative Patient. The 14th International Symposium on Computing in Anaesthesia and Intensive Care. 1994 Apr;Rotterdam, Netherlands.
- 4. **Patel, N.**, King, P.H., Smith, B.E. Estimation of Blood Pressure from an SaO2 Monitor. Patel, N., King, P.H., Smith, B.E., . 1994 Apr;Rotterdam, The Netherlands.
- 5. **Patel NP**, Guyler, MK, Westmoreland, JE. Computerized Inventory Tracking Using Bar Code Technology. Computers in Anesthesiology Symposium XV. 1994 Oct; Monterey, CA.
- 6. **Patel NP**, Flanagan JF, Gilbreath, AB, King, PH, Smith, BE. Automated EtCO2 Monitoring In Patients Receiving Postoperative Opioids. Computers in Anesthesiology Symposium XV. 1994 Oct; Monterey, CA.
- 7. **Patel NP**, Guyler, MK, Westmoreland, JE. Computerized Inventory Tracking Using Bar Code Technology. Computers in Anesthesiology Symposium XV. 1994 Oct; Monterey, CA.
- 8. Flanagan JF, **Patel, NP**, King, PH, Smith, BE. Respiratory Monitoring In The Adult and Pediatric Patient Receiving Perioperative Opioids. 48th Postgraduate Assembly (PGA). 1994 Dec; NY, NY.
- Patel NP, Flanagan JF, King, PH, Smith, BE. Automated EtCO2 Monitoring In Spontaneously Breathing Post-Operative Patients Receiving Opioid Therapy. Computers in Anesthesiology Symposium XVI. 1995 Oct; Nashville, TN.
- 10. **Patel NP**, Flanagan JFK, King PH, Smith BE. Automated EtCO2 Monitoring In Spontaneously Breathing Post-Operative Patients Receiving Opioid Therapy. 70th Clinical and Scientific Congress of the International Anesthesia Research Society. 1996 Mar; Washington, DC.
- 11. Higgins MS, **Patel NP**, Beattie C. Vanderbilt Perioperative Information Management System (VPIMS)
  Capitalizes On Wireless Technology. 71st Clinical and Scientific Congress of the International Anesthesia
  Research Society. 1997 Mar;San Francisco, CA.
- 12. Higgins MH, Beattie C, St. Jacques P, **Patel NP**, Yarbrough J, Tsai YS. Vanderbilt Perioperative Information Management System Forms Foundation for Outcomes Management. 1997 American Medical Informatics Association Fall Symposium. 1997 Oct; Nashville, TN.
- 13. Tsai YS, King PH, Higgins MH, Pierce D, **Patel NP**. An Expert-Guided Decision Tree Construction Strategy: An Application in Knowledge Discovery with Medical Databases. 1997 American Medical Informatics Association Fall Symposium. 1997 Oct;Nashville, TN.
- 14. Waitman LR, Higgins MH, King PH, Miller ML, **Patel NP**. Perioperative Information via the Web Enables Efficiency in Patient Care. 1997 American Medical Informatics Association Fall Symposium. 1997 Oct; Nashville, TN.
- 15. Higgins MS, **Patel NP**, Pierce D, Culpepper C, Beattie C. Profiling of Surgeon Preoperative Test Ordering Reduces Perioperative Testing Costs. 51st Postgraduate Assembly (PGA). 1998 Dec;NY, NY.
- 16. Higgins MS, **Patel NP**, Yarbrough JL, Beattie C. The Vanderbilt Perioperative Information Management System (VPIMS) Uses Wireless Technology To Move Closer To An Electronic Anesthesiology Record. 51st Postgraduate Assembly (PGA). 1998 Dec;NY, NY.
- 17. Churchwell K, Calder C, Steanson K, **Patel N**imesh, Deshpande J, **Patel N**eal. Development of a Computerized Pediatric Database for Patients Admitted to the Pediatric Critical Care Unit (PCCU). 2000 American Academy of Pediatrics. 2000 Oct; Chicago, IL.
- 18. St Jacques P, **Patel N**, Higgins MS. The use of vigilance technology to improve safety and efficiency in patient care. Congressional Healthcare Forum. 2003.
- 19. P. St. Jacques, M.D., N. Patel B.M.E., J.Balser, M.D. Ph.D., M.Higgins, M.D., M.P.H. Improving Operating Room Efficiency Through Anesthesiologist Performance Profiling. 2003 Association of University Anesthesiologists 50th Anniversary Meeting. 2003 May; Milwaukee, WI.
- 20. P.St.Jacques, M.D., N.Patel, B.M.E., M.Higgins, M.D., M.P.H. Improving Operating Room Efficiency Through Anesthesiologist Performance Based Incentives and Profiling. 2003 American Society of Anethesiologists Annual Meeting. 2003 Oct; San Francisco, CA.
- 21. St Jacques P, **Patel N**, Higgins MS. The use of Vigilance technology to improve safety and efficiency in the operating room. ASA Annual Meeting. 2004 Oct.
- 22. Paul J. St. Jacques, M.D., Nimesh Patel, M.D., Michael S. Higgins, M.D. Vigilance Computer Technology to Create an O.R. Suite Without Walls. 2004 American Society of Anethesiologists Annual Meeting. 2004 Oct;Las Vegas, NV.
- 23. St Jacques P, **Patel N**, Higgins MS. Enhancing Compliance with Standard Indicators via an Electronic Data Collection System. STA Annual Meeting. 2007.
- 24. Higgins MS, St. Jacques PJ, Patel NP. Vigilance System. HIMSS. 2008; Orlando, FL.

- 25. St Jacques PS, **Patel N**, Lancaster L, Higgins MS. Medical informatics of perioperative management. HIMSS. 2008; Orlando, FL.
- 26. Rothman B, Gotow B, **Patel N**, Higgins MS, StJacques PJ. Two Approaches to the Use of an iPhone as a Mobile PIMS Device. Society for Technology in Anesthesia Annual Meeting. 2010 Jan; Palm Beach, FL.

#### **Books**

 Patel N. Interfacing Sensors to the IBM PC" by W. Tompkins and J. Webster. Engelwood Cliffs: Prentice Hall, Inc; 1992 Dec;xi-447. ISBN: 0-13-469081-8.

#### **Presentations**

#### Other

- 1. Nagashima Users Group Meeting. Sweet Briar, Virginia. 1991; Computer Assisted Phonatory Function Analysis.
- 2. Computers in Anesthesia XII. Fish Camp, California. 1991 Oct; Calculating Cerebral Blood Flow Using the Fick Principle.
- 3. Southeastern University Department of Anesthesia Chairmen (SUDAC); Nashville, Tennessee. 1993 Mar; Computerized Record Keeping Systems.
- 4. Computers in Anesthesia XIV. Williamsburg, Virginia. 1993 Oct; Database Applications in Anesthesiology.
- 5. 68th Clinical and Scientific Congress. International Anesthesia Research Society; Orlando, Florida. 1994 Mar; Respiratory Monitoring in the Post-Operative Patient Receiving Post-Operative Epidural Narcotics.
- 6. Computers in Anesthesiology Symposium XV. Monterey, California. 1994 Oct; Computerized Inventory Tracking Using Bar Code Technology.
- 7. Computers in Anesthesiology Symposium XV. Monterey, California. 1994 Oct; Automated EtCO2 Monitoring In Patients Receiving Postoperative Opioids.
- 8. 48th Postgraduate Assembly (PGA). New York, New York. 1994 Dec; Respiratory Monitoring In The Adult and Pediatric Patient Receiving Perioperative Opioids.
- 9. Computers in Anesthesiology Symposium XVI. Nashville, Tennessee. 1995 Oct; Automated EtCO2 Monitoring In Spontaneously Breathing Post-Operative Patients Receiving Opioid Therapy.
- 70th Clinical and Scientific Congress. International Anesthesia Research Society; Washington, Dist. Of Col..
   1996 Mar; Automated EtCO2 Monitoring In Spontaneously Breathing Post-Operative Patients Receiving Opioid Therapy.
- 11. 71st Clinical and Scientific Congress. International Anesthesia Research Society; San Francisco, California. 1997 Mar; 70th Clinical and Scientific Congress.
- 12. Fall Symposium. 1997 American Medical Informatics Association; Nashville, Tennessee. 1997 Oct; Perioperative Information via the Web Enables Efficiency in Patient Care.
- 13. Fall Symposium. 1997 American Medical Informatics AssociatioN; Nashville, Tennessee. 1997 Oct; Vanderbilt Perioperative Information Management System Forms Foundation for Outcomes Management.
- 14. 51st Postgraduate Assembly (PGA). New York, New York. 1998 Dec; Profiling of Surgeon Preoperative Test Ordering Reduces Perioperative Testing Costs.
- 15. 51st Postgraduate Assembly (PGA). New York, New York. 1998 Dec; The Vanderbilt Perioperative Information Management System (VPIMS) Uses Wireless Technology To Move Closer To An Electronic Anesthesiology Record.
- 16. Congressional Healthcare Forum; Afghanistan. 2003; The use of vigilance technology to improve safety and efficiency in patient care.
- 17. Annual Meeting. ASA; Afghanistan. 2004; The use of Vigilance technology to improve safety and efficiency in the operating room.
- 18. Annual Meeting. 2004 American Society of Anethesiologists; Las Vegas, Nevada. 2004 Oct; Vigilance Computer Technology to Create an O.R. Suite Without Walls.
- 19. Annual Meeting. STA; Afghanistan. 2007; Enhancing Compliance with Standard Indicators via an Electronic Data Collection System.
- 20. HIMSS; Orlando, Florida, Afghanistan. 2008; Medical informatics of perioperative management.
- 21. MSHUG Innovation Award. HIMSS; Orlando, Florida. 2008; Vigilance System.
- 22. Annual Meeting. Society for Technology in Anesthesia; Palm Beach, Florida. 2010 Jan; Two Approaches to the Use of an iPhone as a Mobile PIMS Device.