Wayne K. Jacobsen, M.D., F.C.C.M. Professor and Chair Department of Anesthesiology The University of Arizona College of Medicine 520.626.7195 jacobsen@anesth.arizona.edu

Major - History/Minor - Chemistry

Education: 1970 BA: Pacific Union College, Angwin, California 1973 **MD**: Medicine

	Loma Linda University Medical Center, Loma Linda, California
01/1974 – 12/1974	Internship : Rotating Loma Linda University Medical Center, Loma Linda, California
01/1975 – 12/1976	Residency:AnesthesiologyLoma Linda University Medical Center, Loma Linda, California1975Medical Student Teaching Award
01/1977 – 12/1977	Fellowship : Surgical Intensive Care Loma Linda University Medical Center, Loma Linda, California
01/1978 - 12/1978	Fellowship: Pediatric Intensive Care

Hospital for Sick Children, Toronto, Ontario, Canada

Licensure

2004-present	Arizona
1974-present	California
1974-2004	Washington
1981-1989	Virginia

Diplomate

1975	National Board of Medical Examiners
1989	Fellow, American College of Critical Care

Certification

1979	American Board of Anesthesiology
1986	American Board of Anesthesiology, Certificate of Competence in Critical
	Care Medicine

Academic Appointments

1983-1994	Assistant Professor of Anesthesiology and Critical Care Medicine,
	Loma Linda University School of Medicine
1983-1994	Assistant Professor of Pediatrics
	Loma Linda University School of Medicine
1983-1994	Associate Professor of Anesthesiology and Critical Care Medicine
	Loma Linda University School of Medicine
1983-1994	Associate Professor of Pediatrics
	Loma Linda University School of Medicine
1993-2003	Professor of Anesthesiology and Critical Care Medicine
	Loma Linda University School of Medicine
1993-2003	Professor of Pediatrics
	Loma Linda University School of Medicine
1995-2002	Chair, Department of Anesthesiology
	Loma Linda University School of Medicine
2003	Chief of Anesthesia
	Jerry L. Pettis Memorial Veteran's Hospital, Loma Linda
2004-present	Professor of Clinical Anesthesiology
	University of Arizona, Tucson
2004-2013	Associate Head for Education
	Department of Anesthesiology
	University of Arizona, University Physicians Healthcare
2005-2013	Anesthesiology Residency Program Director
	University of Arizona, Tucson
2013-2015	Interim Chair, Department of Anesthesiology
	University of Arizona, Tucson
2015-present	Chair, Department of Anesthesiology
	University of Arizona, Tucson

Medical Staff Appointments

1979-2002	Active Status, Department of Anesthesiology
	Loma Linda University Medical Center, Loma Linda, California

1979-1991	Co-Director, Surgical Trauma Intensive Care Unit
	Loma Linda University Medical Center, Loma Linda, California
1983-1994	Medical Director, CPR Center
	Loma Linda University Medical Center, Loma Linda, California
1983-1994	Courtesy Status, Department of Anesthesiology
	Riverside General Hospital (A.K.A. Riverside County Regional Medical
	Center), Riverside, California
1983-1994	Courtesy Status, Department of Anesthesiology
	Loma Linda Community Hospital (A.K.A. Loma Linda University East
	Campus), Loma Linda, California
1991-2002	Director, Surgical Trauma Intensive Care Unit
	Loma Linda University Medical Center, Loma Linda, California
2003	Chief of Anesthesia
	Jerry L. Pettis Memorial Veteran's Administration Hospital, Loma Linda,
	California
2004-present	Member, Pharmacy and Therapeutics Committee
-	University of Arizona Health Sciences Center, Tucson, Arizona
2010-Present	Member, Faculty Practice Committee
	University of Arizona Health Sciences Center, Tucson, Arizona
2014-Present	Member, Medical Executive Committee,
	Banner University Medical Center - Tucson, Tucson, Arizona
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Other Appointments

1981	Member, Advisory Panel, American Edwards Laboratory
1981-2002	Member, Board of Directors, Loma Linda Anesthesiology Medical Group,
	Incorporated
1982-1983	Medical Advisory Council, Cobe Laboratories, Denver, Colorado
1982-1987	Member, American Heart Association, San Bernardino County Chapter
1990-1991	Secretary, Medical Staff, Loma Linda University Medical Center
1991-1992	President, Walter MacPherson Society
1992-1994	Member, Society of Critical Care Medicine – Committee for Task Force
	on Manpower
1994-1995	Chair, Education Committee, California Chapter, Society of Critical Care
	Medicine
1994-1995	Member, Nominations Committee, California Chapter, Society of Critical
	Care Medicine
1995-2002	President, Board of Directors, Loma Linda University Anesthesiology
	Medical Group, Incorporated
1995-2002	Member, Society of Academic Anesthesiology Chairs
1997-2002	Representative, Residency Review Committee, Accreditation Council for
	Graduate Medical Education (ACGME)
1997-present	Member, Association of University Anesthesiologists
2004-2013	Member, University Physicians Healthcare Credentials Committee

2005-present Member, Educational Council, Association of University Anesthesiologists

Society Memberships

American Society of Anesthesiologists Arizona Society of Anesthesiologists International Anesthesia Research Society Society of Critical Care Medicine Walter MacPherson Society American Society of Critical Care Anesthesiologists Alpha Omega Alpha – Honor Medical Society

Loma Linda University Medical Center Committees

1980-1994	Member, Trauma Committee
1980-1990	Member, Nutrition Committee
1980-2002	Member, Critical Care Committee
1980-1993	Member, Trauma Chart Review Committee
1981	Member, Brain Death Committee
1981-2002	Member, Transplant Committee
1981	Member, Code Blue Committee
1981-1990	Member, Disaster Control Committee
1981-1982	Co-Chair, Disaster Control Committee
1982-1987	Chair, Code Blue Committee
1986-2002	Member, Utilization Review Committee
1987-1990	Member, Respiratory Care Committee
1988-1990	Member, Quality Assurance Subcommittee II
1996-2002	Member, Billing and Audit Compliance Steering Committee
1996-2002	Member, Anesthesia/OR Operations QI Committee
1996-2002	Member, Care of Patients Committee
1996-2002	Member, Medical Executive Committee
1996-2002	Member, Operating Room Committee
1996-2002	Member, Professional Practice Committee
1996-2002	Member, Trauma/ICU Care Issues
1998-2001	Chair, Interdisciplinary Practice Committee
1998-2002	Member, Contracting Oversight Committee

Loma Linda University Committees

1994-1995	Member, University Organization Committee
1994-1995	Chair, Fundamental Values Task Force Committee
1995-2002	Member, Health Sciences Education Task Force Committee

Loma Linda University School of Medicine Committees

1979	Member, Student Affairs
1982	Member, Search Committee for Department of Anesthesiology Chair
1990	Member, Search Committee for Transplant Chair
1991-1994	Member, Clinical Scientific Advisory Council
1992-1993	Member, Faculty Grievance Committee
1993	Member, LCME Self-Study on Governance and Administration
1993-1995	Member, Curriculum Steering Committee on Assessment
1994-1995	Head, Critical Care Anesthesiology Division
1996-2002	Member, Board of Directors, Radiation Medicine
1996-2002	Member, Board of Directors, Department of Radiology
1996-2002	Member, Board of Directors, Department of Surgery
1996-2002	Member, Board of Directors, Department of Family Medicine
1998-2002	Chair, Compensation and Finance Committee
1996-2002	Member, Faculty Practice Group

Loma Linda University Department of Anesthesiology Committees

1982-1995	Member, Library Committee
1982-2002	Member, Research Committee
1994-2002	Member, Residency Committee
1995-2002	Chair, Operation Committee
1995-2002	Member, Billing and Reimbursement Committee
1995-2002	Member, Education Committee
1996-2002	Chair, Seminar Management Committee
1995-2002	Chair, Compensation Committee
1996	Member, Well-being Committee

University of Arizona School of Medicine Committees

2010-present	Member, Dean's Advisory Council, University of Arizona College of
	Medicine
2015-present	Member, Education Committee, University of Arizona College of
	Medicine
2015-present	Member, Research Committee, University of Arizona College of Medicine

University of Arizona Department of Anesthesiology Committees

2004-Present	Member, Executive Committee
2004-Present	Member, Clinical Competence Committee
2004-Present	Member, Resident Education Committee
2004-Present	Member, Resident Recruitment Committee

School of Allied Health Professions Committee

1990-1995 Medical Director, Life Support Education

Bibliography

Journal Publications

- 1. Jacobsen WK, Brauer, FS, Smith L. Heparin activity monitoring during vascular surgery. *The American Journal of Surgery*, 136:141-144;1978.
- 2. Jacobsen WK, Smith DC, Briggs BA, Dunbar RD. Aberrant catheter placement for total parenteral nutrition. *Anesthesiology*, 50:152-154;1979.
- 3. Jacobsen WK, Briggs BA, Thorp R, Zumwalt JR. Air embolism in association with LeVeen shunt. *Critical Care Medicine*, 8:659-660;1980.
- 4. Jacobsen WK, Smith DC, Briggs BA, Ching KS, Seaman LR. Continuous intravenous morphine infusion in post thoracotomy patients. *University Surgeon*, 1:25-28;1982.
- 5. Nelson RD, Wilkens RL, Jacobsen WK, Sheldon RL. Supranormal PvO2 noted in the presence of tissue hypoxia. *Respiratory Care*, 28:191-194;1983.
- 6. Jacobsen WK, Briggs BA, Mason LJ. Paradoxical air embolism associated with a central TPN catheter. *Critical Care Medicine*, 11:383;1983.
- 7. Jacobsen WK, Mason LJ, Briggs BA, Schneider S, Thompson JC. Correlation of spontaneous respiration and neurologic damage in near drowning. *Critical Care Medicine*, 11:487-489;1983.
- 8. Mason LJ, Jacobsen WK, Lau CA, Roddy SM, Briggs BA, Hough JM. Temperature instability as an early predictive factor of brain death in paediatric near-drowning victims. *ACTA Anaesthesiologica Belgica*, 3:230-233;1985.
- 9. Martin RD, Bailey LL, Jacobsen WK, Cole DJ, Allard MW. Anesthesia for neonatal orthotopic cardiac xenograft. *The Journal of Cardiothoracic Anesthesia*, 1:132-136;1987.
- 10. Wooley JL, Barker GR, Jacobsen WK, Gingrich GA, Stewart SC, Briggs BA, Martin RD, Melashenko, RA. The effect of the calcium entry blocker verapamil on renal ischemia. *Critical Care Medicine*, 16:48-51;1988.
- 11. Jacobsen WK, Cole DJ, Stewart SC, et al. The effect of the calcium entry blocker nitrendipine on renal function following renal vascular occlusion. *Critical Care Medicine*, 18(12):1403-1407;1990.

- 12. Jacobsen WJ, Isaacs WB. Cerebral injury: Are manipulations in carbon dioxide beneficial? *Journal of Neurosurgical Anesthesiology*, 5(1)59-62;1993.
- 13. Jacobsen WK, Schell RM, Matsumura JS, et al. Nitrendipine and superoxide dismutase in ischemic renal injury. *Renal Failure*, 16(6):697-705;1994.
- 14. Cole DJ, McKay LD, Jacobsen WK, Hoffman J, Drummond JC, Patel PM. Effect of subarachnoid administration of α - α diaspirin crosslinked hemoglobin on cerebral blood flow in rats. *Artif Cells Blood Substit Biotechnol*, 25(1-2):95-104;1997.
- 15. Cole DJ, Nary JC, Drummond JC, Patel PM, Jacobsen WK. α-α diaspirin crosslinked hemoglobin, nitric oxide, and cerebral ischemic injury in rats. *Artif Cells Blood Substit Biotechnol*, 25(1-2):141-152;1997.
- Cole DJ, Reynolds LW, Nary J, Drummond JC, Patel PM, Jacobsen WK. Subarachnoid hemorrhage in rats: Effect of singular or sustained hemodilution with a α-α diaspirin crosslinked hemoglobin on cerebral hypoperfusion. *Critical Care Medicine*, 27(5):972-977;1999.
- 17. Mason LJ, Cojocaru TT, Jacobsen WK, Cole DJ. Effects of anesthetics on central blood flow and metabolism. *Problems in Anesthesia*, 12(4):450-460;2000.
- 18. Cole DJ, Cross LM, Drummond JC, Patel PM, Jacobsen WJ. Thiopentone and methohexital, but not pentobarbitone, reduce early focal cerebral ischemic injury in rats. *Canadian Journal of Anesthesia* 48(8):807-814;2001.
- 19. Badal JJ, Jacobsen WK, Holt BW. The Correlation Between Evaluations of Anesthesiology Residents and the Overuse of the First-Person Pronoun "I" in Personal Statements. *Journal of Graduate Medical Education*; 2011,3(2):151-4.
- 20. Nielsen VG, Pretorius E, Bester J, Jacobsen WK, Boyle PK, Reinhard JP. Carbon Monoxide and Iron Modulate Plasmatic Coagulation in Alzheimer's Disease. *Current Neurovasc Res* 2015, 12(1):31-39. PMID: 25557378.
- Shah N, Welsby IJ, Fielder MA, Jacobsen WK, Nielsen VG. Sickle Cell Disease is Associated with Iron Mediated Hypercoagulability. *J Thromb Thrombolysis* 2015 Aug; 40(2):182-185. Doi: 10.1007/s11239-015-1230-6. PMID: 25986992.

Book Chapters

1. Jacobsen WK. Monitoring the critically ill surgery patient. In: *Principles of Critical Care*. Ihde JK, Jacobsen WK, Briggs BA, Eds. W.B. Saunders, Philadelphia, 1987.

- 2. Jacobsen WK. Cardiovascular pharmacology. In: *Principles of Critical Care*. Ihde JK, Jacobsen WK, Briggs BA, Eds. W.B. Saunders, Philadelphia, 1987.
- 3. Jacobsen WK, Ihde JK, Couperus JJ. Infection in the critically ill surgery patient. In: *Principles of Critical Care*. Ihde JK, Jacobsen WK, Briggs BA, Eds. W.B. Saunders, Philadelphia, 1987.
- 4. Jacobsen WK, Stier GR. Cardiovascular management. In: *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.
- 5. Jacobsen WK, Schmitt SMO. Cardiopulmonary resuscitation. In: *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.
- 6. Brockmann DC, Jacobsen WK, Lobo DP. Respiratory management. In: *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.
- 7. Jacobsen WK. Renal complications. In: *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.
- 8. Jacobsen WK. Endocrine disorders. In: *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.
- 9. Jacobsen WK, Isaacs WB. Orthopedic complications. In: *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.

Editor – Books

- 1. *Principles of Critical Care*. Ihde JK, Jacobsen WK, Briggs BA, Eds. W.B. Saunders, Philadelphia, 1987.
- 2. *Manual of Post Anesthesia Care*. Jacobsen WK, ed. W.B. Saunders, Philadelphia, 1992.

Editor – Journals

1.	1989-1990	Ad Hoc Reviewer, Critical Care Medicine
2.	1992-1994	Ad Hoc Reviewer, Anesthesiology
3.	1992-1994	Ad Hoc Reviewer, Journal of Neurosurgical Anesthesiology
4.	1993-1994	Ad Hoc Reviewer, Anesthesia and Analgesia
5.	1994-1995	Member, Editorial Review Board, Sciences

6. 1997-2004 Member, California Medical Association Scientific Advisory Panel to the Section on Anesthesiology, *The Western Journal of Medicine*.

Abstracts

- 1. Nelson R, Wilkens R, Jacobsen WK, Sheldon R. Supra normal PvO₂ in the presence of tissue hypoxia. *Journal of Respiratory Care*. 25:1250;1980.
- 2. Keitz E, Zumwalt J, Jacobsen WK, Briggs BA. Orientation of new nursing graduates to the intensive care unit. *Critical Care Medicine*. 9:226;1981.
- 3. Schneider S, Jacobsen WK, Mason LJ. Prognostic effect of barbiturate coma in childhood near drowning. Presented at the Federation of Western Societies of Neurologic Science, San Diego, California, 1982.
- 4. Brandstater BJ, Jacobsen WK, Mason LJ, Briggs BA. Predictors of outcome in the nearly drowned child. Presented to the Faculty of Anaesthetists, Royal Australasian College of Surgeons, Hong Kong, 1983.
- 5. Jacobsen WK, Gingrich GA, Woolley JL, Barker GR, Briggs BA, Melashenko RA, Stewart SC. The effect of the calcium entry blocker verapamil on renal ischemia. *Anesthesiology*. 63(3A):487;1985.
- 6. Mason LJ, Jacobsen WK, Martin RD, Brauer FS. Departmental block examination as a predictive value of performance on the ABA/ASA in-training examination. *Anesthesiology*. 63(3A):487;1985.
- 7. Jacobsen WK, Cole DJ, Stewart SC, et al. The effect of nitrendipine on renal function following renal vascular occlusion. Presented at the Scientific Session of the American Society of Critical Care Anesthesiologists Meeting, San Francisco, 1988.
- 8. Schell RM, Jacobsen WK, Matsumura JS, Cole DJ, Stewart SC. Nitrendipine and superoxide dismutase reduce ischemic renal injury. *Anesthesiology* 73:1231;1990.
- 9. Schell RM, Jacobsen WK, Matsumura JS, Cole DJ. Nitrendipine and superoxide dismutase reduce ischemic renal injury in rats. Presented at the Western Anesthesia Residents Conference, Stanford, April, 1991.
- 10. Osorio R, Fandrich B, Stier G, Jacobsen WK. The effect of albumin supplementation in patients receiving TPN. Poster presentation at the LLU Alumni Postgraduate Convention, Loma Linda, 1993.
- 11. McKay LD, Cole DJ, Drummond JC, Patel PM, Jacobsen WK. Effect of nitric oxide on focal cerebral ischemic injury during etomidate or halothane anesthesia in rats. Present at the Western Anesthesia Conference, University of Arizona, May, 1996.

- 12. McKay LD, Cole DJ, Drummond JC, Patel PM, Jacobsen WK. Effect of nitric oxide on focal cerebral ischemic injury during etomidate or halothane anesthesia in rats. Presented at the Annual Meeting of the California Society of Anesthesiologists. San Francisco, May, 1996.
- Drummond JC, Cole DJ, McKay LD, Patel PM, Jacobsen WK. The influence of prior NOS inhibition on the adverse effects of etomidate in the setting of focal cerebral ischemia in rats. Presented at the Neuroanesthesia Research Conference, Boston, June, 1996.
- Cole DJ, Jacobsen WK, Applegate RL, McKay LD, Drummond JC, Patel PM. Effect of subarachnoid administration of α-α diaspirin crosslinked hemoglobin on cerebral blood flow. *Art Cells, Blood Sub, Immob Biotech* 24:321;1996.
- 15. Cole DJ, Nary JC, Reynolds LW, Jacobsen WK, Drummond JC, Patel PM. α-α diaspirin crosslinked hemoglobin and cerebral vasospastic ischemia. *Art Cells, Blood Sub, Immob Biotech* 24:322;1996.
- McKay LD, Drummond JC, Cole DJ, Patel PM, Jacobsen WK. Effect of nitric oxide on focal cerebral ischemic injury during etomidate or halothane anesthesia in rats. *Anesthesiology* 85:1181;1996.
- 17. Cole DJ, McKay LD, Drummond JC, Patel PM, Jacobsen WK. Etomidate, nitric oxide, and cerebral ischemic injury. *J Neurosurg Anesthesiol* 8:329;1996.
- 18. Cole DJ, McKay LD, Drummond JC, Patel PM, Jacobsen WK. Subarachnoid hemorrhage in rats: Effect of sustained hemodilution with molecular hemoglobin on hypoperfusion. *Anesth Analg* 83:S353;1997.
- 19. Cole DJ, McKay LD, Drummond JC, Patel PM, Jacobsen WK. Subarachnoid molecular hemoglobin after subarachnoid hemorrhage in rats: Effect on the area of hypoperfusion. *Anesth Analg* 83:S354;1997.
- 20. Cho J, Jacobsen WK, Shutter L. Effects of iatrogenic hypernatremia in treatment of posttraumatic brain injury. Presented at Western Anesthesia Resident Conference, Portland, May, 2001.
- 21. Kroll P, Jacobsen WK. White cell agglutination on cell saver bowl. Presented at Western Anesthesia Resident Conference, Portland, May, 2001.
- 22. Badal JJ, Redford DT, Jacobsen WK, Azar AE, Lichtenthal PR. The Application of the Berlin Heart and Medos Ventricular Assist Devices in Pediatric Patients with Heart Failure. Poster Presentation: Western Anesthesia Resident Conference, Salt Lake City, Utah 2006.

- 23. Lucas AR, Badal JJ, Jacobsen WK, Jambrosic J. Effects of Lidocaine on Radial Artery Diameter. Poster Presentation: Western Anesthesia Resident Conference, Seattle, Washington, May 2008.
- 24. Howell SG, Lichtenthal PR, Badal JJ, Jacobsen WK. Impact of a National Tragedy on Residency Recruitment. Poster Presentation: Western Anesthesia Resident Conference, Tucson, Arizona 2011.
- 25. Purdy BM, Jacobsen WK, Paidy SR, Poston RS. Robotic Assisted Minimally Invasive Direct Coronary Artery Bypass Surgery. Poster Presentation: Western Anesthesia Resident Conference, Tucson, Arizona 2011.

Presentations

- 2005 Pulmonary Artery Catheters, an Update, Arizona Society of Anesthesiology
- 2005 Anesthetic Management of the Obese Patient, Arizona Society of Anesthesiology
- 2005 American Society of Anesthesiology, Chaired Panel on Obesity and Anesthesiology
- 2008 Chaired Panel on Making a Better Anesthesiologist. Association of University Anesthesiologists Annual Meeting, Duke University
- 2008 Using PaO2 to Evaluate Cardiopulmonary Performance. Lecture presented at the American Society of Anesthesiologists Annual Meeting, Orlando, FL
- 2009 Participant, Arterial Blood Gas Clinical Forum, American Society of Anesthesiologists, New Orleans, Louisiana
- 2010 Moderator, Discussion Panel, Arizona Society of Anesthesiologists Annual Meeting, Scottsdale, Arizona
- 2015 Moderator, Discussion Panel, Arizona Society of Anesthesiologists Annual Meeting, Scottsdale, Arizona
- 2016 Moderator, Discussion Panel, Arizona Society of Anesthesiologists Annual Meeting, Scottsdale, Arizona