

# Stanford

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## William Rhine

Professor of Pediatrics (Neonatology) at Lucile Salter Packard Children's Hospital  
Pediatrics - Neonatal and Developmental Medicine

### CLINICAL OFFICES

- **Neonatal Intensive Care Unit**

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Palo Alto, CA 94304

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### Bio

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### CLINICAL FOCUS

- Neonatal-Perinatal Medicine

### ACADEMIC APPOINTMENTS

- Professor - Med Center Line, Pediatrics - Neonatal and Developmental Medicine

### ADMINISTRATIVE APPOINTMENTS

- President, California Association of Neonatologists, (2005-2006)
- President, Board of Governors, Stanford University School of Med. Alumni Assoc., (2009-2011)
- National Advisory Board Member, Vermont-Oxford Network NICQ, (2007- present)
- Medical Director, Neonatal ICU, (2000- present)

### PROFESSIONAL EDUCATION

- Fellowship: Stanford University School of Medicine Registrar (1989) CA
- Residency: Stanford University School of Medicine Registrar (1987) CA
- Internship: Stanford University School of Medicine (1985) CA
- Medical Education: Stanford University School of Medicine (1984) CA
- Board Certification: Neonatal-Perinatal Medicine, American Board of Pediatrics (1989)
- M.D., Stanford University , Medicine (1984)
- M.S., Mass. Institute of Technology , Nutritional Biochemistry (1979)
- B.S., Mass. Institute of Technology , Biology (1977)

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Neonatology, extracorporeal membrane oxygenation, nitric oxide therapy, mechanisms of bilirubin toxicity and brain injury, non-invasive biotechnologies to study cellular and organ metabolism.

## Publications

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### PUBLICATIONS

- **Parental coping in the neonatal intensive care unit.** *Journal of clinical psychology in medical settings*  
Shaw, R. J., Bernard, R. S., Storfer-Isser, A., Rhine, W., Horwitz, S. M.  
2013; 20 (2): 135-142
- **Impact of an EMR-Based Daily Patient Update Letter on Communication and Parent Engagement in a Neonatal Intensive Care Unit.** *Journal of participatory medicine*  
Palma, J. P., Keller, H., Godin, M., Wayman, K., Cohen, R. S., Rhine, W. D., Longhurst, C. A.  
2012; 4
- **Combining hand techniques with electric pumping increases the caloric content of milk in mothers of preterm infants** *JOURNAL OF PERINATOLOGY*  
Morton, J., Wong, R. J., Hall, J. Y., Pang, W. W., Lai, C. T., Lui, J., Hartmann, P. E., Rhine, W. D.  
2012; 32 (10): 791-796
- **Improved outcomes with a standardized feeding protocol for very low birth weight infants** *JOURNAL OF PERINATOLOGY*  
McCallie, K. R., Lee, H. C., Mayer, O., Cohen, R. S., Hintz, S. R., Rhine, W. D.  
2011; 31: S61-S67
- **Brief Cognitive-Behavioral Intervention for Maternal Depression and Trauma in the Neonatal Intensive Care Unit: A Pilot Study** *JOURNAL OF TRAUMATIC STRESS*  
Bernard, R. S., Williams, S. E., Storfer-Isser, A., Rhine, W., Horwitz, S. M., Koopman, C., Shaw, R. J.  
2011; 24 (2): 230-234
- **Combining hand techniques with electric pumping increases milk production in mothers of preterm infants** *JOURNAL OF PERINATOLOGY*  
Morton, J., Hall, J. Y., Wong, R. J., Thairu, L., Benitz, W. E., Rhine, W. D.  
2009; 29 (11): 757-764
- **A quality improvement project to improve admission temperatures in very low birth weight infants** *JOURNAL OF PERINATOLOGY*  
Lee, H. C., Ho, Q. T., Rhine, W. D.  
2008; 28 (11): 754-758
- **Inhaled nitric oxide in the treatment of preterm infants** *EARLY HUMAN DEVELOPMENT*  
Miller, S. S., Rhine, W. D.  
2008; 84 (11): 703-707
- **Neonatal heparin overdose-a multidisciplinary team approach to medication error prevention.** *The journal of pediatric pharmacology and therapeutics : JPPT : the official journal of PPAG*  
Arimura, J., Poole, R. L., Jeng, M., Rhine, W., Sharek, P.  
2008; 13 (2): 96-98
- **The use of inhaled nitric oxide in the premature infant with respiratory distress syndrome.** *Minerva pediatrica*  
Van Meurs, K., Hintz, S., Rhine, W., Benitz, W.  
2006; 58 (5): 403-422
- **Eliminating nosocomial infections in the NICU: everyone's duty** *JOURNAL OF PERINATOLOGY*  
Rhine, W. D.  
2006; 26 (3): 141-143
- **Venoarterial versus venovenous extracorporeal membrane oxygenation in congenital diaphragmatic hernia: The Extracorporeal Life Support Organization Registry, 1990-1999** *31st Annual Meeting of the Section-on-Surgery of the American-Academy-of-Pediatrics*

Dimmitt, R. A., Moss, R. L., Rhine, W. D., Benitz, W. E., Henry, M. C., VanMeurs, K. P.  
W B SAUNDERS CO-ELSEVIER INC.2001: 1199-1204

- **Decreased use of neonatal extracorporeal membrane oxygenation (ECMO): How new treatment modalities have affected ECMO utilization** *PEDIATRICS*  
Hintz, S. R., Suttner, D. M., Sheehan, A. M., Rhine, W. D., Van Meurs, K. P.  
2000; 106 (6): 1339-1343
- **Tc-99m annexin V imaging of neonatal hypoxic brain injury** *STROKE*  
D'Arceuil, H., Rhine, W., de Crespigny, A., Yenari, M., Tait, J. F., Strauss, W. H., Engelhorn, T., Kastrop, A., Moseley, M., Blankenberg, F. G.  
2000; 31 (11): 2692-2699
- **Secondary infection presenting as recurrent pulmonary hypertension.** *Journal of perinatology*  
Hintz, S. R., Benitz, W. E., Halamek, L. P., Van Meurs, K. P., Rhine, W. D.  
2000; 20 (4): 262-264
- **Sonography, CT, and MR imaging: A prospective comparison of neonates with suspected intracranial ischemia and hemorrhage** *AMERICAN JOURNAL OF NEURORADIOLOGY*  
Blankenberg, F. G., Loh, N. N., Bracci, P., D'Arceuil, H. E., Rhine, W. D., Norbash, A. M., Lane, B., Berg, A., Person, B., Coutant, M., Enzmann, D. R.  
2000; 21 (1): 213-218
- **Serial magnetic resonance diffusion and hemodynamic imaging in a neonatal rabbit model of hypoxic-ischemic encephalopathy** *NMR IN BIOMEDICINE*  
D'Arceuil, H. E., de Crespigny, A. J., Rother, J., Moseley, M., Rhine, W.  
1999; 12 (8): 505-514
- **Bilirubin toxicity and differentiation of cultured astrocytes.** *Journal of perinatology*  
Rhine, W. D., SCHMITTER, S. P., Yu, A. C., Eng, L. F., Stevenson, D. K.  
1999; 19 (3): 206-211
- **Strategy for lipid suppression in lactate imaging using STIR-DQCT: A study of hypoxic-ischemic brain injury** *MAGNETIC RESONANCE IN MEDICINE*  
Nakai, T., Rhine, W. D., Okada, T., Stevenson, D. K., Spielman, D. M.  
1998; 40 (4): 629-632
- **Diffusion and perfusion magnetic resonance imaging of the evolution of hypoxic ischemic encephalopathy in the neonatal rabbit** *JOURNAL OF MAGNETIC RESONANCE IMAGING*  
D'Arceuil, H. E., de Crespigny, A. J., Rother, J., Seri, S., Moseley, M. E., Stevenson, D. K., Rhine, W.  
1998; 8 (4): 820-828
- **Congenital diaphragmatic hernia associated with aortic coarctation** *29th Annual Meeting of the Canadian-Association-of-Paediatric-Surgeons*  
Eghtesady, P., Skarsgard, E. D., Smith, B. M., Robbins, R. C., Wexler, L., Rhine, W. D.  
W B SAUNDERS CO-ELSEVIER INC.1998: 943-45
- **Response of premature infants with severe respiratory failure to inhaled nitric oxide. Premie NO Collaborative Group.** *Pediatric pulmonology*  
Van Meurs, K. P., Rhine, W. D., Asselin, J. M., Durand, D. J.  
1997; 24 (5): 319-323
- **Hemopericardium from coronary artery laceration complicating extracorporeal membrane oxygenation.** *Journal of perinatology*  
Rhine, W. D., Hartman, G. E., Shochat, S. J., Benitz, W. E., Van Meurs, K. P.  
1997; 17 (3): 189-192
- **Nitrovasodilator therapy for severe respiratory distress syndrome.** *Journal of perinatology*  
Benitz, W. E., Rhine, W. D., Van Meurs, K. P., Stevenson, D. K.  
1996; 16 (6): 443-448
- **A model for detecting early metabolic changes in neonatal asphyxia by 1H-MRS** *JOURNAL OF MAGNETIC RESONANCE IMAGING*  
Nakai, T., Rhine, W. D., Enzmann, D. R., Stevenson, D. K., Spielman, D. M.  
1996; 6 (3): 445-452
- **NEONATAL JAUNDICE - WHAT NOW** *CLINICAL PEDIATRICS*  
Dennery, P. A., Rhine, W. D., Stevenson, D. K.  
1995; 34 (2): 103-107

- **LOBAR LUNG TRANSPLANTATION AS A TREATMENT FOR CONGENITAL DIAPHRAGMATIC-HERNIA** *JOURNAL OF PEDIATRIC SURGERY*  
VanMeurs, K. P., Rhine, W. D., Benitz, W. E., Shochat, S. J., Hartman, G. E., Sheehan, A. M., Starnes, V. A.  
1994; 29 (12): 1557-1560
- **INTRACRANIAL ABNORMALITIES AND NEURODEVELOPMENTAL STATUS AFTER VENOVENOUS EXTRACORPOREAL MEMBRANE-OXYGENATION** *JOURNAL OF PEDIATRICS*  
VanMeurs, K. P., Nguyen, H. T., Rhine, W. D., Marks, M. P., Fleisher, B. E., Benitz, W. E.  
1994; 125 (2): 304-307
- **GD-DTPA MR DETECTION OF BLOOD-BRAIN-BARRIER OPENING IN RATS AFTER HYPEROSMOTIC SHOCK** *JOURNAL OF COMPUTER ASSISTED TOMOGRAPHY*  
Rhine, W. D., Benaron, D. A., Enzmann, D. R., Chung, C., GONZALESMENDEZ, R., Sayre, J. R., Stevenson, D. K.  
1993; 17 (4): 563-566
- **ANTICOAGULATION THERAPY ADVISER - A DECISION-SUPPORT SYSTEM FOR HEPARIN-THERAPY DURING ECMO** *16th Annual Symposium on Computer Applications in Medical Care*  
Pevevini, R. L., Sale, M., Rhine, W. D., Fagan, L. M., Lenert, L. A.  
MCGRAW-HILL BOOK CO.1993: 567-578
- **Where should the hemofiltration circuit be placed in relation to the extracorporeal membrane oxygenation circuit?** *ASAIO journal*  
Yorgin, P. D., Kirpekar, R., Rhine, W. D.  
1992; 38 (4): 801-803
- **Anticoagulation therapy advisor: a decision-support system for heparin therapy during ECMO.** *Proceedings / the ... Annual Symposium on Computer Application [sic] in Medical Care. Symposium on Computer Applications in Medical Care*  
Pevevini, R. L., Sale, M., Rhine, W. D., Fagan, L. M., Lenert, L. A.  
1992: 567-571
- **Fatal postoperative Legionella pneumonia in a newborn.** *Journal of perinatology*  
Greene, K. A., Rhine, W. D., Starnes, V. A., Ariagno, R. L.  
1990; 10 (2): 183-184