

# Stanford

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## Sonia Bonifacio

Clinical Professor, Pediatrics - Neonatal and Developmental Medicine

### CLINICAL OFFICES

- **Neonatology**

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### Bio

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#### CLINICAL FOCUS

- Neonatal-Perinatal Medicine

#### ACADEMIC APPOINTMENTS

- Clinical Professor, Pediatrics - Neonatal and Developmental Medicine
- Member, Maternal & Child Health Research Institute (MCHRI)

#### PROFESSIONAL EDUCATION

- Board Certification: Neonatal-Perinatal Medicine, American Board of Pediatrics (2010)
- Fellowship: Univ of California San Francisco, School of Medicine (2009) CA United States of America
- Board Certification: Pediatrics, American Board of Pediatrics (2006)
- Residency: Univ of California San Francisco, School of Medicine (2006) CA United States of America
- Internship: Univ of California San Francisco, School of Medicine (2004) CA United States of America
- Medical Education: University of California at San Francisco School of Medicine (2003) CA

### Research & Scholarship

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#### CLINICAL TRIALS

- TIME Study: Therapeutic Hypothermia for Infants With Mild Encephalopathy, Not Recruiting

### Publications

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#### PUBLICATIONS

- **Unanswered questions in neonates with NE.** *Seminars in fetal & neonatal medicine*  
Wintermark, P., El Dib, M., Bonifacio, S. L., Newborn Brain Society Guidelines and Publications Committee  
2021: 101260
- **Issues in the daily management of neonates with NE.** *Seminars in fetal & neonatal medicine*  
Wintermark, P., El Dib, M., Bonifacio, S. L., Newborn Brain Society Guidelines and Publications Committee

2021: 101255

- **Unanswered questions regarding therapeutic hypothermia for neonates with neonatal encephalopathy.** *Seminars in fetal & neonatal medicine*  
Sabir, H., Bonifacio, S. L., Gunn, A. J., Thoresen, M., Chalak, L. F., Newborn Brain Society Guidelines and Publications Committee  
2021: 101257
- **Seizure Control in Neonates Undergoing Screening vs Confirmatory EEG Monitoring.** *Neurology*  
Wusthoff, C. J., Sundaram, V., Abend, N. S., Massey, S. L., Lemmon, M. E., Thomas, C., McCulloch, C. E., Chang, T., Soul, J. S., Chu, C. J., Rogers, E. E., Bonifacio, S. L., Cilio, et al  
2021
- **Outcomes of infants with hypoxic ischemic encephalopathy and persistent pulmonary hypertension of the newborn: results from three NICHD studies.** *Journal of perinatology : official journal of the California Perinatal Association*  
Agarwal, P., Shankaran, S., Lptook, A. R., Chowdhury, D., Lakshminrusimha, S., Bonifacio, S. L., Natarajan, G., Chawla, S., Keszler, M., Heyne, R. J., Ambalavanan, N., Walsh, M. C., Das, et al  
2021
- **Early MRI Predicts 30-Month Outcomes After Therapeutic Hypothermia for Neonatal Encephalopathy.** *The Journal of pediatrics*  
Bach, A. M., Fang, A. Y., Bonifacio, S., Rogers, E. E., Scheffler, A., Partridge, J. C., Xu, D., Barkovich, A. J., Ferriero, D. M., Glass, H. C., Gano, D.  
2021
- **Associations between Infant and Parent Characteristics and Measures of Family Well-Being in Neonates with Seizures: A Cohort Study.** *The Journal of pediatrics*  
Franck, L. S., Shellhaas, R. A., Lemmon, M. n., Sturza, J. n., Soul, J. S., Chang, T. n., Wusthoff, C. J., Chu, C. J., Massey, S. L., Abend, N. S., Thomas, C. n., Rogers, E. E., McCulloch, et al  
2020; 221: 64–71.e4
- **Management of Multi Organ Dysfunction in Neonatal Encephalopathy.** *Frontiers in pediatrics*  
O'Dea, M., Sweetman, D., Bonifacio, S. L., El-Dib, M., Austin, T., Molloy, E. J.  
2020; 8: 239
- **Characterization of Death in Infants With Neonatal Seizures.** *Pediatric neurology*  
Lemmon, M. E., Bonifacio, S. L., Shellhaas, R. A., Wusthoff, C. J., Greenberg, R. G., Soul, J. S., Chang, T. n., Chu, C. J., Bates, S. n., Massey, S. L., Abend, N. S., Cilio, M. R., Glass, et al  
2020; 113: 21–25
- **Neonatal Neurocritical Care: Providing Brain-Focused Care for All at Risk Neonates.** *Seminars in pediatric neurology*  
Bonifacio, S. L., Van Meurs, K.  
2019; 32: 100774
- **Differences in patient characteristics and care practices between two trials of therapeutic hypothermia** *PEDIATRIC RESEARCH*  
Bonifacio, S. L., McDonald, S. A., Chock, V. Y., Wusthoff, C. J., Hintz, S. R., Lptook, A. R., Shankara, S., Van Meurs, K. P.  
2019; 85 (7): 1008–15
- **Differences in patient characteristics and care practices between two trials of therapeutic hypothermia.** *Pediatric research*  
Bonifacio, S. L., McDonald, S. A., Chock, V. Y., Wusthoff, C. J., Hintz, S. R., Lptook, A. R., Shankara, S., Van Meurs, K. P.  
2019
- **Response to antiseizure medications in neonates with acute symptomatic seizures** *EPILEPSIA*  
Glass, H. C., Soul, J. S., Chu, C. J., Massey, S. L., Wusthoff, C. J., Chang, T., Cilio, M., Bonifacio, S. L., Abend, N. S., Thomas, C., Lemmon, M., McCulloch, C. E., Shellhaas, et al  
2019; 60 (3): E20–E24
- **Response to antiseizure medications in neonates with acute symptomatic seizures.** *Epilepsia*  
Glass, H. C., Soul, J. S., Chu, C. J., Massey, S. L., Wusthoff, C. J., Chang, T., Cilio, M. R., Bonifacio, S. L., Abend, N. S., Thomas, C., Lemmon, M., McCulloch, C. E., Shellhaas, et al  
2019
- **Toward the elimination of bias in Pediatric Research.** *Pediatric research*  
Bearer, C. n., Agostoni, C. n., Anand, K. J., Ambalavanan, N. n., Bhandari, V. n., Bliss, J. M., Bloomfield, F. n., Bonifacio, S. L., Buhimschi, I. n., Cilio, M. R., Coppes, M. n., Czinn, S. J., El-Khuffash, et al

2019

- **Development of a NeuroNICU with a Broader Focus on All Newborns at Risk of Brain Injury: The First 2 Years** *AMERICAN JOURNAL OF PERINATOLOGY*  
Van Meurs, K. P., Yan, E. S., Randall, K. S., Chock, V. Y., Davis, A. S., Glennon, C. S., Clark, C. L., Wusthoff, C. J., Bonifacio, S. L.  
2018; 35 (12): 1197–1205
- **Pulmonary Hypertension Associated with Hypoxic-Ischemic Encephalopathy-Antecedent Characteristics and Comorbidities** *JOURNAL OF PEDIATRICS*  
Lakshminrusimha, S., Shankaran, S., Lptook, A., McDonald, S., Keszler, M., Van Meurs, K., Guillet, R., Chawla, S., Sood, B. G., Bonifacio, S., Das, A., Higgins, R. D.  
2018; 196: 45-+
- **Development of a NeuroNICU with a Broader Focus on All Newborns at Risk of Brain Injury: The First 2 Years.** *American journal of perinatology*  
Van Meurs, K. P., Yan, E. S., Randall, K. S., Chock, V. Y., Davis, A. S., Glennon, C. S., Clark, C. L., Wusthoff, C. J., Bonifacio, S. L.  
2018
- **Seizures in Preterm Neonates: A Multicenter Observational Cohort Study.** *Pediatric neurology*  
Glass, H. C., Shellhaas, R. A., Tsuchida, T. N., Chang, T., Wusthoff, C. J., Chu, C. J., Cilio, M. R., Bonifacio, S. L., Massey, S. L., Abend, N. S., Soul, J. S.  
2017
- **Brain-focused care in the neonatal intensive care unit: the time has come.** *Jornal de pediatria*  
Van Meurs, K. P., Bonifacio, S. L.  
2017
- **Characterization of Death in Neonatal Encephalopathy in the Hypothermia Era.** *Journal of child neurology*  
Lemmon, M. E., Boss, R. D., Bonifacio, S. L., Foster-Barber, A., Barkovich, A. J., Glass, H. C.  
2017; 32 (4): 360-365
- **Treatment Duration After Acute Symptomatic Seizures in Neonates: A Multicenter Cohort Study.** *journal of pediatrics*  
Shellhaas, R., Chang, T., Wusthoff, C., Soul, J., Massey, S., Chu, C., Cilio, M. R., Bonifacio, S., Abend, N., Tsuchida, T., Glass, H.  
2017; 181: 298-301 e1
- **Decreased Morphine Clearance in Neonates With Hypoxic Ischemic Encephalopathy Receiving Hypothermia** *JOURNAL OF CLINICAL PHARMACOLOGY*  
Frymoyer, A., Bonifacio, S. L., Drover, D. R., Su, F., Wustoff, C. J., Van Meurs, K. P.  
2017; 57 (1): 64-76
- **Contemporary Profile of Seizures in Neonates: A Prospective Cohort Study** *JOURNAL OF PEDIATRICS*  
Glass, H. C., Shellhaas, R. A., Wusthoff, C. J., Chang, T., Abend, N. S., Chu, C. J., Cilio, M. R., Glidden, D. V., Bonifacio, S. L., Massey, S., Tsuchida, T. N., Silverstein, F. S., Soul, et al  
2016; 174: 98-?
- **High-Dose Erythropoietin and Hypothermia for Hypoxic-Ischemic Encephalopathy: A Phase II Trial** *PEDIATRICS*  
Wu, Y. W., Mathur, A. M., Chang, T., McKinstry, R. C., Mulkey, S. B., Mayock, D. E., Van Meurs, K. P., Rogers, E. E., Gonzalez, F. F., Comstock, B. A., Juul, S. E., Msall, M. E., Bonifacio, et al  
2016; 137 (6)
- **The Neurointensive Care Nursery and Evolving Roles for Nursing** *NEONATAL NETWORK*  
Peloquin, S., Carley, A., Bonifacio, S. L., Glass, H. C.  
2016; 35 (2): 87–94
- **Predictive Performance of a Gentamicin Population Pharmacokinetic Model in Neonates Receiving Full-Body Hypothermia** *THERAPEUTIC DRUG MONITORING*  
Sampson, M. R., Frymoyer, A., Rattray, B., Cotten, C. M., Smith, P. B., Capparelli, E., Bonifacio, S. L., Cohen-Wolkowicz, M.  
2014; 36 (5): 584-589
- **Predictive performance of a gentamicin population pharmacokinetic model in neonates receiving full-body hypothermia.** *Therapeutic drug monitoring*  
Sampson, M. R., Frymoyer, A., Rattray, B., Cotten, C. M., Smith, P. B., Capparelli, E., Bonifacio, S. L., Cohen-Wolkowicz, M.  
2014; 36 (5): 584-589
- **Risk factors for EEG seizures in neonates treated with hypothermia: A multicenter cohort study.** *Neurology*  
Glass, H. C., Wusthoff, C. J., Shellhaas, R. A., Tsuchida, T. N., Bonifacio, S. L., Cordeiro, M., Sullivan, J., Abend, N. S., Chang, T.

2014; 82 (14): 1239-1244

- **Every 36-h gentamicin dosing in neonates with hypoxic-ischemic encephalopathy receiving hypothermia.** *Journal of perinatology*  
Frymoyer, A., Lee, S., Bonifacio, S. L., Meng, L., LUCAS, S. S., Guglielmo, B. J., Sun, Y., Verotta, D.  
2013; 33 (10): 778-782
- **Gentamicin pharmacokinetics and dosing in neonates with hypoxic ischemic encephalopathy receiving hypothermia.** *Pharmacotherapy*  
Frymoyer, A., Meng, L., Bonifacio, S. L., Verotta, D., Guglielmo, B. J.  
2013; 33 (7): 718-726