





## Kanwaljeet Anand

Professor of Pediatrics (Pediatric Critical Care) and of Anesthesiology, Perioperative and Pain Medicine at the Stanford University Medical Center

Pediatrics - Critical Care

 NIH Biosketch available Online

 Curriculum Vitae available Online

 Resume available Online

### CONTACT INFORMATION

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### Bio

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#### BIO

Dr. Kanwaljeet Anand graduated from M.G.M. Medical College, Indore (India). As a Rhodes Scholar at University of Oxford, he received the D.Phil. degree, followed by post-doctoral fellowship at Harvard Medical School, a categorical Pediatrics residency training at Boston Children's Hospital and a Critical Care Medicine fellowship at the Massachusetts General Hospital, Boston.

His pioneering research was widely recognized by the Dr. Michael Blacow Award from British Paediatric Association (1986), Pediatric Resident Research Award from American Academy of Pediatrics (1992), the inaugural Young Investigator Award in Pediatric Pain from International Association for Study of Pain (IASP, 1994), the Jeffrey Lawson Award for Children's Advocacy from American Pain Society (2000), the Windermere Honorary Lectureship Award from Royal College of Paediatrics & Child Health (2004), Joan M. Cranmer "Mentor of the Year" Award (2007) from University of Arkansas, the Nils Rosén von Rosenstein Award\* from the Swedish Academy of Medicine (2009), Top Mentor Award, School of Graduate Studies, University of Arkansas for Medical Sciences (2011), the 9th Annual "In Praise of Medicine" Public Address at Erasmus University (2014), the Journées Nationales de Néonatalogie 2015 Address at The Pasteur Institute (Paris, France), the Nightingale Excellence Award (2016) from Stanford Children's Healthcare, and an Honorary Doctorate from University of Örebro, Sweden (2019). Dr. Anand founded the Harmony Health Clinic, the largest charitable medical & dental clinic in Central Arkansas and worked to remove inter-faith conflict throughout the state of Arkansas. The Father Joseph Biltz Award (2007) from the National Conference for Community & Justice (NCCJ) and the Dr. Martin Luther King "Salute to Greatness" Individual Award (2008) from the Governor of Arkansas recognized his commitments to community service.

Dr. Anand is currently Professor of Pediatrics, Anesthesiology, Perioperative & Pain Medicine at Stanford University School of Medicine; he directs the Pain/Stress Neurobiology Lab, the Jackson Vaughan Critical Care Research Fund, and serves as Field Chief Editor for the journal *Frontiers in Pediatrics*. He has published >275 peer-reviewed articles, edited 9 books or journal issues, and has contributed >65 book chapters and numerous other publications. He is considered a world authority on pain and stress in newborns and the pain management in infants.

#### ACADEMIC APPOINTMENTS

- Professor - Med Center Line, Pediatrics - Critical Care
- Professor - Med Center Line, Anesthesiology, Perioperative and Pain Medicine
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

## HONORS AND AWARDS

- Honorary Doctorate, Doctor of Medicine, Faculty of Medicine and Health, University of Örebro, Örebro, Sweden (February, 2019)
- Co-Chair, Annual International Conferences on the Ideal Village Program, Stanford University School of Medicine (2017, 2018, 2019)
- Chair, SBIB-H82 Study Section, Clinical Fetal & Pediatric Applications, NIH/Center for Scientific Review (2018)
- Chief Guest, Inaugural Function of the 37th Annual Meeting of National Neonatology Forum, National Neonatology Forum, India (December, 2017)
- Member, 2018/01 SBIB-H82, Study Section, Clinical Fetal & Pediatric Applications, NIH/Center for Scientific Review (October, 2017)
- Member, Pediatric Pain Consensus Task Force, Ethical Guidelines for Pediatric Pain Research, The MayDay Fund (2017)
- Member, SBIB-H82, Clinical Fetal & Pediatric Applications Study Section, NIH/Center for Scientific Review (February, 2017)
- Member, Special Emphasis Panel/Scientific Review Group 2016/01 ZHD1 DSR-K (90), Eunice Kennedy Shriver National Institute for Child Health & Human Development (2016)
- Member, ZRG1 PSE-D (90), Neurological, Aging & Musculoskeletal Epidemiology (NAME) Study Section, NIH/Center for Scientific Review (2016)
- Nightingale Excellence Award for Physicians, Stanford Children's Healthcare System (2016)
- Elected as Executive Committee Member for the PPRN, the Pediatric Section of the ACTION Network, Pediatric Pain Research Network (2015)
- Member, Study Section for STTR Applications, Eunice Kennedy Shriver National Institute for Child Health & Human Development/NIH (2015)

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Anand is a translational clinical researcher who pioneered research on the endocrine-metabolic stress responses of infants undergoing surgery and developed the first-ever scientific rationale for pain perception in early life. This provided a framework for newer methods of pain assessment, numerous clinical trials of analgesia/anesthesia in newborns, infants and older children. His research focus over the past 30+ years has contributed fundamental knowledge about pediatric pain/stress, long-term effects of pain in early life, management of pain, mechanisms for opioid tolerance and withdrawal. Current projects in his laboratory are focused on developing biomarkers for repetitive pain/stress in critically ill children and the mechanisms underlying sedative/anesthetic neurotoxicity in the immature brain. He designed and directed many randomized clinical trials (RCT), including the largest-ever pediatric analgesia trial studying morphine therapy in ventilated preterm neonates. He has extensive experience in clinical and translational research from participating in collaborative networks funded by NIMH, NINDS, or NICHD, a track-record of excellent collaboration across multiple disciplines, while achieving success with large research teams like the Collaborative Pediatric Critical Care Research Network (CPCCRN). He played a leadership roles in CANDLE (Condition Affecting Neuro-Development & Learning in Early infancy) and other activities of the Urban Child Institute and UT Neuroscience Institute. More recently, he led the NeoOpioid Consortium funded by the European Commission, which collected data from 243 NICUs in 18 European countries.

### CLINICAL TRIALS

- Assessment of Pain in Newborns and Older Infants (Infant Pain Assessment Study =, Recruiting

## Teaching

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### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Pediatric Critical Care Medicine (Fellowship Program)

## Publications

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### PUBLICATIONS

- **Demographic and psychosocial factors associated with hair cortisol concentrations in preschool children.** *Pediatric research*  
Anand, K. J., Rovnaghi, C. R., Rigdon, J., Qin, F., Tembulkar, S., Murphy, L. E., Barr, D. A., Gotlib, I. H., Tylavsky, F. A.  
2019

- **Measuring socioeconomic adversity in early life** *ACTA PAEDIATRICA*  
Anand, K. S., Rigdon, J., Rovnaghi, C. R., Qin, F., Tembulkar, S., Bush, N., LeWinn, K., Tylavsky, F. A., Davis, R., Barr, D. A., Gotlib, I. H.  
2019; 108 (7): 1267–77
- **Measuring socioeconomic adversity in early life.** *Acta paediatrica (Oslo, Norway : 1992)*  
Anand, K. J., Rigdon, J., Rovnaghi, C. R., Qin, F., Tembulkar, S., Bush, N., LeWinn, K., Tylavsky, F. A., Davis, R., Barr, D. A., Gotlib, I. H.  
2019
- **Discovering Pain in Newborn Infants.** *Anesthesiology*  
Anand, K. J.  
2019
- **Toward the elimination of bias in Pediatric Research.** *Pediatric research*  
Bearer, C., Agostoni, C., Anand, K. J., Ambalavanan, N., Bhandari, V., Bliss, J. M., Bloomfield, F., Bonifacio, S. L., Buhimschi, I., Cilio, M. R., Coppes, M., Czinn, S. J., El-Khuffash, et al  
2019
- **Maternal experiences of trauma and hair cortisol in early childhood in a prospective cohort** *PSYCHONEUROENDOCRINOLOGY*  
Sloven, N., Roberts, A. L., LeWinn, K. Z., Bush, N. R., Rovnaghi, C. R., Tylavsky, F., Anand, K. S.  
2018; 98: 168–76
- **Pathways from adverse childhood experiences to nervous system dysregulation.** (<https://www.internalmedicinereview.org/index.php/imr/article/download/773/pdf>). *Internal Medicine Review*  
Rovnaghi, C. R., Anand, K. J.  
2018; 4 (10): 1-20
- **Clinical Profile Associated with Adverse Childhood Experiences: The Advent of Nervous System Dysregulation.** *Children (Basel, Switzerland)*  
Elbers, J., Rovnaghi, C. R., Golianu, B., Anand, K. J.  
2017; 4 (11)
- **Defining pain in newborns: Need for a uniform taxonomy?** *Acta paediatrica (Oslo, Norway : 1992)*  
Anand, K. J.  
2017
- **Assessment of Continuous Pain in Newborns admitted to NICUs in 18 European Countries.** *Acta paediatrica*  
Anand, K. J., Eriksson, M., Boyle, E. M., Avila-Alvarez, A., Andersen, R. D., Sarafidis, K., Polkki, T., Matos, C., Lago, P., Papadouri, T., Attard-Montalto, S., Ilmoja, M., Simons, et al  
2017
- **Does noninvasive electrical stimulation of acupuncture points reduce heelstick pain in neonates?** *Acta paediatrica*  
Mitchell, A. J., Hall, R. W., Golianu, B., Yates, C., Williams, D. K., Chang, J., Anand, K. J.  
2016
- **Revisiting a dilemma: repetitive pain vs. opioid exposures?** *ACTA PAEDIATRICA*  
Anand, K. J.  
2016; 105 (7): 736-737
- **The validity and reliability of the Evaluation of Intervention Scale: preliminary report** *ACTA PAEDIATRICA*  
Warren, I., Hicks, B., Kleberg, A., Eliahoo, J., Anand, K. J., Hickson, M.  
2016; 105 (6): 618-622
- **Ketamine exposure during embryogenesis inhibits cellular proliferation in rat fetal cortical neurogenic regions** *ACTA ANAESTHESIOLOGICA SCANDINAVICA*  
Dong, C., Rovnaghi, C. R., Anand, K. J.  
2016; 60 (5): 579-587
- **Regulation of inflammatory biomarkers by intravenous methylprednisolone in pediatric ARDS patients: Results from a double-blind, placebo-controlled randomized pilot trial** *CYTOKINE*  
Schwingshackl, A., Kimura, D., Rovnaghi, C. R., Saravia, J. S., Cormier, S. A., Teng, B., West, A. N., Meduri, U. G., Anand, K. J.  
2016; 77: 63-71

- **Epidemiology and neonatal pain management of heelsticks in intensive care units: EPIPAIN 2, a prospective observational study.** *International journal of nursing studies*  
Courtois, E., Droutman, S., Magny, J. F., Merchaoui, Z., Durrmeyer, X., Roussel, C., Biran, V., Eleni, S., Vottier, G., Renolleau, S., Desfrere, L., Castela, F., Boimond, et al  
2016; 59: 79–88
- **Plasma Biomarker Analysis in Pediatric ARDS: Generating Future Framework from a Pilot Randomized Control Trial of Methylprednisolone: A Framework for Identifying Plasma Biomarkers Related to Clinical Outcomes in Pediatric ARDS.** *Frontiers in pediatrics*  
Kimura, D., Saravia, J., Rovnaghi, C. R., Meduri, G. U., Schwingshackl, A., Cormier, S. A., Anand, K. J.  
2016; 4: 31-?
- **Research as a Standard of Care in the PICU** *PEDIATRIC CRITICAL CARE MEDICINE*  
Zimmerman, J. J., Anand, K. J., Meert, K. L., Willson, D. F., Newth, C. J., Harrison, R., Carcillo, J. A., Berger, J., Jenkins, T. L., Nicholson, C., Dean, J. M.  
2016; 17 (1): E13-E21
- **Methodological Considerations for Hair Cortisol Measurements in Children** *THERAPEUTIC DRUG MONITORING*  
Slominski, R., Rovnaghi, C. R., Anand, K. J.  
2015; 37 (6): 812-820
- **Long-Acting Opioids for Treating Neonatal Abstinence Syndrome A High Price for a Short Stay?** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*  
Peltz, G., Anand, K. J.  
2015; 314 (19): 2023-2024
- **Corticosteroids in pediatric ARDS: all cards on the table** *INTENSIVE CARE MEDICINE*  
Schwingshackl, A., Meduri, G. U., Kimura, D., Cormier, S. A., Anand, K. J.  
2015; 41 (11): 2036-2037
- **Sedation and analgesia practices in neonatal intensive care units (EUROPAIN): results from a prospective cohort study** *LANCET RESPIRATORY MEDICINE*  
Carbajal, R., Eriksson, M., Courtois, E., Boyle, E., Avila-Alvarez, A., Andersen, R. D., Sarafidis, K., Polkki, T., Matos, C., Lago, P., Papadouri, T., Montalto, S. A., Ilmoja, et al  
2015; 3 (10): 796-812
- **Pediatric Intensive Care Unit Mortality Among Latino Children Before and After a Multilevel Health Care Delivery Intervention** *JAMA PEDIATRICS*  
Anand, K. J., Sepanski, R. J., Giles, K., Shah, S. H., Juarez, P. D.  
2015; 169 (4): 383-390
- **Double-blind, placebo-controlled pilot randomized trial of methylprednisolone infusion in pediatric acute respiratory distress syndrome.** *Pediatric critical care medicine*  
Drago, B. B., Kimura, D., Rovnaghi, C. R., Schwingshackl, A., Rayburn, M., Meduri, G. U., Anand, K. J.  
2015; 16 (3): e74-81
- **Clinical risk factors for central line-associated venous thrombosis in children.** *Frontiers in pediatrics*  
Shah, S. H., West, A. N., Sepanski, R. J., Hannah, D., May, W. N., Anand, K. J.  
2015; 3: 35-?
- **Pain Management in Newborns** *CLINICS IN PERINATOLOGY*  
Hall, R. W., Anand, K. J.  
2014; 41 (4): 895-?
- **Chronic Pain in the Newborn Toward a Definition** *CLINICAL JOURNAL OF PAIN*  
van Ganzewinkel, C., Anand, K. J., Kramer, B. W., Andriessen, P.  
2014; 30 (11): 970-977
- **Ketamine Affects the Neurogenesis of Rat Fetal Neural Stem Progenitor Cells via the PI3K/Akt-p27 Signaling Pathway** *BIRTH DEFECTS RESEARCH PART B-DEVELOPMENTAL AND REPRODUCTIVE TOXICOLOGY*  
Dong, C., Rovnaghi, C. R., Anand, K. J.  
2014; 101 (5): 355-363

- **A Single Nucleotide Polymorphism in the Corticotropin Receptor Gene Is Associated With a Blunted Cortisol Response During Pediatric Critical Illness** *PEDIATRIC CRITICAL CARE MEDICINE*  
Jardine, D., Emond, M., Meert, K. L., Harrison, R., Carcillo, J. A., Anand, K. J., Berger, J., Newth, C. J., Willson, D. F., Nicholson, C., Dean, J. M., Zimmerman, J. J.  
2014; 15 (8): 698-705
- **Pediatric critical care: grand challenges for a glowing future.** *Frontiers in pediatrics*  
Anand, K. J.  
2014; 2: 35-?
- **Eight Years Later, Are We Still Hurting Newborn Infants?** *NEONATOLOGY*  
Roofthoof, D. W., Simons, S. H., Anand, K. J., Tibboel, D., van Dijk, M.  
2014; 105 (3): 218-226
- **Early Adversity, Socioemotional Development, and Stress in Urban 1-Year-Old Children** *JOURNAL OF PEDIATRICS*  
Palmer, F. B., Anand, K. J., Graff, J. C., Murphy, L. E., Qu, Y., Voelgyi, E., Rovnaghi, C. R., Moore, A., Tran, Q. T., Tylavsky, F. A.  
2013; 163 (6): 1733-U291
- **Pain Panacea for Opiophobia in Infants?** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*  
Anand, K. J.  
2013; 309 (2): 183-184
- **A comparison of critical care research funding and the financial burden of critical illness in the United States** *CRITICAL CARE MEDICINE*  
Coopersmith, C. M., Wunsch, H., Fink, M. P., Linde-Zwirble, W. T., Olsen, K. M., Sommers, M. S., Anand, K. J., Tchorz, K. M., Angus, D. C., Deutschman, C. S.  
2012; 40 (4): 1072-1079
- **Pediatric Analgesic Clinical Trial Designs, Measures, and Extrapolation: Report of an FDA Scientific Workshop** *PEDIATRICS*  
Berde, C. B., Walco, G. A., Krane, E. J., Anand, K. J., Aranda, J. V., Craig, K. D., Dampier, C. D., Finkel, J. C., Grabis, M., Johnston, C., Lantos, J., Lebel, A., Maxwell, et al  
2012; 129 (2): 354-364
- **Response to letter to the Editor** *ACTA PAEDIATRICA*  
Rovnaghi, C. R., Tembulkar, S., Rigdon, J., Anand, K. S.  
2019; 108 (7): 1362
- **Response to letter to the Editor.** *Acta paediatrica (Oslo, Norway : 1992)*  
Rovnaghi, C. R., Tembulkar, S., Rigdon, J., Anand, K. J.  
2019
- **Clinical trial designs and models for analgesic medications for acute pain in neonates, infants, toddlers, children, and adolescents: ACTION recommendations** *PAIN*  
Walco, G. A., Kopecky, E. A., Weisman, S. J., Stinson, J., Stevens, B., Desjardins, P. J., Berde, C. B., Krane, E. J., Anand, K. S., Yaster, M., Dampier, C. D., Dworkin, R. H., Gilron, et al  
2018; 159 (2): 193-205
- **Editorial: Work-Life Balance: Essential or Ephemeral?** *FRONTIERS IN PEDIATRICS*  
Schwingshackl, A., Anand, K. J.  
2017; 5
- **Editorial: ARDS: Reaching for the Horizon** *FRONTIERS IN PEDIATRICS*  
McGuire, J. K., Schwingshackl, A., Anand, K. J.  
2017; 5
- **Sedation and analgesia practices at Italian neonatal intensive care units: results from the EUROPAIN study.** *Italian journal of pediatrics*  
Lago, P., Frigo, A. C., Baraldi, E., Pozzato, R., Courtois, E., Rambaud, J., Anand, K. J., Carbajal, R.  
2017; 43 (1): 26-?
- **Consequences of prenatal opioid use for newborns** *ACTA PAEDIATRICA*  
Anand, K. J., Campbell-Yeo, M.  
2015; 104 (11): 1066-1069

- **Sedation and analgesia practices among Spanish neonatal intensive care units** *ANALES DE PEDIATRIA*  
Avila-Alvarez, A., Carbajal, R., Courtois, E., Pertega-Diaz, S., Muniz-Garcia, J., Anand, K. J.  
2015; 83 (2): 75-84
- **Inverse Relationship between Cardio-Ankle Vascular Index and Body Mass Index in Healthy Children** *JOURNAL OF PEDIATRICS*  
Philip, R., Alpert, B. S., Schwingshackl, A., Huang, X., Blakely, D., Rovnaghi, C. R., Tran, Q. T., Velasquez, A., Arevalo, A., Anand, K. J.  
2015; 167 (2): 361-?
- **[Sedation and analgesia for neonates in NICUs across Europe]**. *Archives de pédiatrie : organe officiel de la Société française de pédiatrie*  
Carbajal, R., Eriksson, M., Courtois, E., Anand, K. J.  
2015; 22 (5): 95-96
- **[Clinical assessment of pain in Spanish Neonatal Intensive Care Units]**. *Anales de pediatria (Barcelona, Spain : 2003)*  
Avila-Alvarez, A., Carbajal, R., Courtois, E., Pertega-Diaz, S., Anand, K. J., Muñoz-García, J.  
2015
- **Multiple intravenous doses of paracetamol result in a predictable pharmacokinetic profile in very preterm infants** *ACTA PAEDIATRICA*  
van Ganzewinkel, C., Derijks, L., Anand, K. J., Van Lingen, R. A., Neef, C., Kramer, B. W., Andriessen, P.  
2014; 103 (6): 612-617
- **Interpretation of Cortisol Concentrations and Reference Intervals from the CALIPER Database** *CLINICAL CHEMISTRY*  
Rovnaghi, C. R., Kala, A. F., Allen, S. L., Anand, K. J.  
2014; 60 (2): 418-419
- **Does neonatal pain management in intensive care units differ between night and day? An observational study** *BMJ OPEN*  
Guedj, R., Danan, C., Daoud, P., Zupan, V., Renolleau, S., Zana, E., Aizenfisz, S., Lapillonne, A., de Saint Blanquat, L., Granier, M., Durand, P., Castela, F., Coursol, et al  
2014; 4 (2)
- **Repetitive neonatal pain and neurocognitive abilities in ex-preterm children** *PAIN*  
Anand, K. J., Palmer, F. B., Papanicolaou, A. C.  
2013; 154 (10): 1899-1901
- **Physicians' Conceptualization of "Closure" as a Benefit of Physician-Parent Follow-up Meetings after a Child's Death in the Pediatric Intensive Care Unit** *JOURNAL OF PALLIATIVE CARE*  
Eggly, S., Meert, K. L., Berger, J., Zimmerman, J., Anand, K. J., Newth, C. J., Harrison, R., Carcillo, J., Dean, J. M., Willson, D. F., Nicholson, C.  
2013; 29 (2): 69-75
- **Developmental neurotoxicity of ketamine in pediatric clinical use** *TOXICOLOGY LETTERS*  
Dong, C., Anand, K. J.  
2013; 220 (1): 53-60
- **The Role of the Data and Safety Monitoring Board in a Clinical Trial: The CRISIS Study** *PEDIATRIC CRITICAL CARE MEDICINE*  
Holubkov, R., Casper, T. C., Dean, J. M., Anand, K. J., Zimmerman, J., Meert, K. L., Newth, C. J., Berger, J., Harrison, R., Willson, D. F., Nicholson, C.  
2013; 14 (4): 374-383
- **Baseline Serum Concentrations of Zinc, Selenium, and Prolactin in Critically Ill Children** *PEDIATRIC CRITICAL CARE MEDICINE*  
Heidemann, S. M., Holubkov, R., Meert, K. L., Dean, J. M., Berger, J., Bell, M., Anand, K. J., Zimmerman, J., Newth, C. J., Harrison, R., Willson, D. F., Nicholson, C., Carcillo, et al  
2013; 14 (4): E202-E206
- **Severe acute asthma exacerbation in children: a stepwise approach for escalating therapy in a pediatric intensive care unit.** *The journal of pediatric pharmacology and therapeutics : JPPT : the official journal of PPAG*  
Nievas, I. F., Anand, K. J.  
2013; 18 (2): 88-104
- **Does neonatal morphine use affect neuropsychological outcomes at 8 to 9 years of age?** *Pain*  
de Graaf, J., van Lingen, R. A., Valkenburg, A. J., Weisglas-Kuperus, N., Groot Jebbink, L., Wijnberg-Williams, B., Anand, K. J., Tibboel, D., van Dijk, M.  
2013; 154 (3): 449-458

- **Opioid Analgesia in Mechanically Ventilated Children: Results From the Multicenter Measuring Opioid Tolerance Induced by Fentanyl Study** *PEDIATRIC CRITICAL CARE MEDICINE*  
Anand, K. J., Clark, A. E., Willson, D. F., Berger, J., Meert, K. L., Zimmerman, J. J., Harrison, R., Carcillo, J. A., Newth, C. J., Bisping, S., Holubkov, R., Dean, J. M., Nicholson, et al  
2013; 14 (1): 27-36
- **Ketamine alters the neurogenesis of rat cortical neural stem progenitor cells** *CRITICAL CARE MEDICINE*  
Dong, C., Rovnaghi, C. R., Anand, K. J.  
2012; 40 (8): 2407-2416
- **Ketamine as a neuroprotective and anti-inflammatory agent in children undergoing surgery on cardiopulmonary bypass: A pilot randomized, double-blind, placebo-controlled trial** *PEDIATRIC CRITICAL CARE MEDICINE*  
Bhutta, A. T., Schmitz, M. L., Swearingen, C., James, L. P., Wardbegnoche, W. L., Lindquist, D. M., Glasier, C. M., Tuzcu, V., Prodhon, P., Dyamenahalli, U., Imamura, M., Jaquiss, R. D., Anand, et al  
2012; 13 (3): 328-337
- **The randomized comparative pediatric critical illness stress-induced immune suppression (CRISIS) prevention trial** *PEDIATRIC CRITICAL CARE MEDICINE*  
Carcillo, J. A., Dean, J. M., Holubkov, R., Berger, J., Meert, K. L., Anand, K. J., Zimmerman, J., Newth, C. J., Harrison, R., Burr, J., Willson, D. F., Nicholson, C.  
2012; 13 (2): 165-173
- **Oral Sucrose and "Facilitated Tucking" for Repeated Pain Relief in Preterms: A Randomized Controlled Trial** *PEDIATRICS*  
Cignacco, E. L., Sellam, G., Stoffel, L., Gerull, R., Nelle, M., Anand, K. J., Engberg, S.  
2012; 129 (2): 299-308
- **A pilot study of preemptive morphine analgesia in preterm neonates: Effects on head circumference, social behavior, and response latencies in early childhood** *NEUROTOXICOLOGY AND TERATOLOGY*  
Ferguson, S. A., Ward, W. L., Paule, M. G., Hall, R. W., Anand, K. J.  
2012; 34 (1): 47-55
- **Neonatal pain assessment in Sweden - a fifteen-year follow up** *ACTA PAEDIATRICA*  
Gradin, M., Eriksson, M.  
2011; 100 (2): 204-208
- **Comparison at 32-37 weeks postconception of infants born 1983-1989 and 1995-2004 on the neurobehavioral assessment of the preterm infant** *INFANCY*  
Brown, J. V., Bakeman, R., Sampers, J. S., Korner, A. F., Constantinou, J. C., Anand, K. J.  
2008; 13 (4): 393-409
- **Non-pharmacological techniques for pain management in neonates** *SEMINARS IN PERINATOLOGY*  
Golianu, B., Krane, E., Seybold, J., Almgren, C., Anand, K. J.  
2007; 31 (5): 318-322
- **Evaluation and development of potentially better practices to improve pain management of neonates** *PEDIATRICS*  
Sharek, P. J., Powers, R., Koehn, A., Anand, K. J.  
2006; 118: S78-S86