

#### **Governing Board:**

Avroy Fanaroff (USA), Honorary President

Manuel Sanchez Luna (Spain), President Ashok Gupta (India), Executive Director Francis B Mimouni (Israel) Secretary General Lucky Jain - Chair (USA) Scientific Committee

Issue 5, March 2018

#### **INA NEWS Editorial Board**

Arun Pramanik (USA)
Jean-Charles Picaud (France)
Raid Umran, (Iraq)
Michael Segall (USA)
Jose Honold (USA)
Mohamed Reda Bassiony (Egypt)

### **Standing Committee:**

Amit Gupta (UK)
Ajay Gambhir (India)
Arun Pramanik (USA)
Augusto Sola (Argentina))
Blondel Crosdale (Jamaica)
Chinyere Ezeaka (Nigeria)
David H Adamkin (USA
Mohd. Reda Bassiony (Egypt
Raid M R Umran (Iraq)
Ariadne Malamitse-Puchner [Greece]
Silvia Maria Stoicescu (Romania)
Sithembiso Velaphi (South Africa)
Tom Stiris (Norway)

#### **Advisors:**

Lex Doyle (Australia) Michael Weindling (UK)





18 Avenue Louis-Casai | 1209 Geneva | Switzerland

www.worldneonatology.org

email: info@worldneonatology.org







It is my great pleasure, as President of the International Neonatology Association (INA), to welcome you to the 4th Conference in the city of Ghent, Belgium, on June 22-24, 2018.

INA was established to promote high quality standards of neonatal practice and care for the benefit of the global Neonatology. The goals of this association are to collect and disseminate information on improvements in neonatal care and share it with INA members and related organization to improve outcome.

The excellent work done by Professor Avroy Fanaroff, Honorary President and founding President of the INA, and all of the members of the governing body has

established a unique and attractive standard in education through the annual conference in Neonatology, where science and clinical practice join together.

Our worldwide Association promotes not only high quality of care for neonates and their families, but also to decrease health disparities and improve neonatal outcomes globally.

The 4th Conference will offer a unique opportunity to meet the key opinion leaders in Neonatology and interact with them about the most exciting topics.

It is also my pleasure to announce the creation of the "Professor Fanaroff Award" that for the first time will be given to recognize the most promising young investigator at the INA Conference.

We hope to meet you all at Ghent where the best clinical practice, research and teaching will join for a few days continuing building this passionate project of global Neonatology.

European Neonatology News: Professor Charles Chrisph Roehr, Department of Paediatrics (Newborn Services), Oxford University Hospitals, UK, was elected as the incoming president of the European Society of Pediatric Research (ESPR).

The new chairman of The European Board of Neonatology is Professor Max Vento, Division of Neonatology, University and Polytechnic Hospital La Fe, Valencia, Spain.

April 27th is deadline for submitting the 2018 INAC Abstracts at www.worldneonatology.org

Manuel Sanchez Luna, M.D.
President
Chair, Scientific Committee, INAC 2018

Medical Director
Neonatology Division & NICU
Hospital General Universitario "GREGORIO MARAÑON"
Madrid Spain



# NA Executive **Director**



Greetings from the International Neonatology Association (INA) office!!

2017 has been a good year for INA, with our membership growth by an additional 400 new members. Our global membership encompasses more than 76 countries.

The latest members represent a diverse group of countries which include: USA, Israel, India, Russia, Mongolia, Canada, Poland, Brazil, Mexico, Cambodia, Indonesia, Egypt, Palestine, Slovakia, Nigeria, Serbia, Portuguese, Tunisia, Pakistan, Nepal, Algeria, Libya, Ecuador, Jordan....This has been a result of the outstanding leadership support along with strong focus on academics. INA was invited by the World Health Organization in its meeting on the Baby Friendly Hospital Initiative. A number of global initiatives communicated interest in networking with us, which include Community outreach on Birth Injuries, Guy's and Thomas' visiting professor program, Bempu Health Research Award, Beaurea de Geneva, etc. Year Book of International organizations Belgium also invited us to be listed there. Sydney, Australia has proposed to host INAC. The Journal, "Breast Feeding Medicine", Mary Ann Lieber, Inc. Publishers NY has me on their editorial board.

We anticipate that 2018 will add new individual, organization and country memberships with greater visibility of INA. I welcome your suggestions.





Ashok Gupta, M.D. **Executive Director, INAC 2018** Professor. SMS Medical College, Jaipur, India

# Newsletter Editorial Board



Our mission statement is on the INA website (www.worldneonatology.org), with the goal being to encourage member countries to highlight their successes and challenges in neonatal and maternal care.

INA's objective is to share evidence-based neonatal-perinatal medicine with its member to incorporate in their practice. This was exemplified by the quality of presentations at the last three conferences. At the 2017 Lyon conference, the symposia, scientific presentations and abstracts encompassed the state of art neonatal care by experts in global neonatology. The detailed 2017 INAC program is listed on the website (above). Participants gave positive feedback on their educational experience, and were able to network to improve collaboration. Minutes of the INA board meeting held on July 8, 2017 in Lyon, France is outlined on page 4 of this newsletter. **Professor** Manuel Sanchez Luna was unanimously voted as President of INA. Professor Avory Fanaroff's services was recognized and he was named Honorary President of INA. The INAC best poster award was named "Fanaroff Award". We hope to educate Neonatologists, public health officials, and health care providers in Neonatal-Perinatal medicine by sharing evidence from clinical trials, with emphasis on applying it to resource-limited areas. We anticipate working with leaders and organizations in the respective INA member countries, and other global agencies with the hope that neonatal-maternal care and outcomes will improve.

We have included selected abstracts of new information (pages 5 to 10), links at INA website to access journals, and several policy statements.

Our long-term vision is to encourage leaders of their respective countries to institute measures to address neonatal and maternal morbidity and mortality in a cost-effective manner. We suggest visiting the WHO website for recent publications on MCH. Hopefully, this will minimize preventable deaths, stillbirths by implementing 'standards of care' practices, transport guidelines for high-risk mothers and newborn infants. We urge you all to send the board members concerns, accomplishments and research initiatives by your group (may include a photo), along with recent publications, such as: peer-reviewed articles, texts, policy statements implemented in your area so that we can share them with others. We seek your contributions and suggestions to improve the contents of this newsletter. Please feel free to communicate with the editorial board information that may be pertinent to clinicians, educators and researchers, as to how INA can assist you.

Finally, we appreciate your spreading the message about the role of INA in your region.

#### Dear colleagues,

On behalf of the Scientific Committee of the International Neonatology Association and the Steering Committee of the Belgian Society of Neonatology, it is my privilege and great pleasure to invite you all to the  $4^{th}$  International Neonatology Association Conference which will be held in the beautiful, historical city of Ghent, Belgium, on June 22 – 24, 2018.

At this conference state-of-the-art information is updated by experts in neonatal clinical care. In addition to keynote lectures on main topics, with emphasis on neonatal neurology, and specific aspects of neonatal care will be discussed during concurrent sessions. It will begin with a workshop with high educational value. The INAC offers opportunities to meet with col-

The INAC offers opportunities to meet with colleagues & speakers from all over the world to exchange ideas and experiences. Neonatologists, neonatal nurses and nurse practitioners are encouraged to attend and contribute by submitting abstracts.

Ghent is a charming city in the middle of Flanders with a unique and beautifully restored medieval centre. Enjoy a delicious Belgian beer on a terrace with a view on the medieval Gravensteen castle. Stroll along the riverside on the Graslei and imagine yourself being in an 11<sup>th</sup> century movie decor. Savor sweet Belgian waffle, and enjoy eating it overlooking the St-Baafs Square with its magnificent cathedral. Admire the unique and worldfamous 15<sup>th</sup> century altarpiece "Adoration of the Mystic Lamb" in the cathedral, painted by the brothers Van Eyck. The National Geographic Traveler Magazine placed Ghent third in its global ranking of authentic destinations, praising it for its "brilliant mix of a wonderful past and a contemporary, vibrant city"! Mark your calendars to visit Ghent for an unforgettable experience!

Professor Filip Cools
Chairman, Fourth INAC.

IN A Newsletter Editorial
Arun Pramanik (USA)
Jean-Charles Picaud (France)
Mohamed Reda Bassiony (Egypt)
Raid Umran, (Iran)
Mike Segall (USA)
Jose Honold (USA)



# INA Articles of Interest

European recommendation for Critical Congenital Heart Defects screening in Newborn infants: "Pulse oximetry screening for critical congenital heart defects:

a European consensus statement" The Lancet Child & Adolescent Health, 2017 Vol. 1, No. 2, p88–90.

Sánchez Luna M, Pérez Muñuzuri A, Sanz López E, et al. <u>Pulse oximetry screening of critical congenital heart defects in the neonatal period.</u> [The Spanish National Neonatal Society recommendation]. *An Pediatr (Barc)* 2018 Feb; 88(2): 112.e1-112.e6.

Rodríguez Ogando A, Ballesteros Tejerizo F, Blanco Bravo D, Sánchez Luna M, Zunzunegui Martínez JL. <u>Transcatheter Occlusion of Patent Ductus Arteriosus in Preterm Infants Weighing Less Than 2 kg With the Amplatzer Duct Occluder II Additional Sizes Device</u>. *Rev Esp Cardiol (Engl Ed) 2017. Sep 12. PMID: 28916428 DOI: 10.1016/j.rec.2017.08.014* 

A Randomized Clinical Trial of Umbilical Cord Milking vs Delayed Cord Clamping in Preterm Infants: Neurodevelopmental Outcomes at 22-26 Months of Corrected Age.

Anup Katheria, MD, Donna Garey, MPH, MD, Giang Truong, MD, et al. J Pediatr. 2017 Dec 7. In Press

OBJECTIVE: To compare the effect of umbilical cord milking vs delayed cord clamping (DCC) on neurodevelopmental and health outcomes in very preterm infants at 22-26 months of corrected age.

Of the 197 infants enrolled in the original study there were 15 deaths, 5 in the umbilical cord milking group and 10 in DCC group. Demographics in umbilical cord milking (n = 70) and DCC (n = 65) groups were similar. Infants randomized to umbilical cord milking at birth had significantly higher cognitive and language composite scores, and were less likely to have a cognitive composite score of <85 (4% vs 15%; P = .04). Infants randomized to umbilical cord milking had higher language and cognitive scores compared with those randomized to DCC. There was no difference in rates of mild or moderate to severe neurodevelopmental impairment.

Kateria et al are conducting a 9 center international study which may provide a more definitive management of this group of infants.

<u>Delayed versus immediate cord clamping in preterm infants</u> <u>Tarnow-Mordi W, Morris J, Kirby A, et al.</u> *N Engl J Med. 2017; 377:2445-2455.* 

The preferred timing of umbilical-cord clamping in preterm infants remains unclear. The authors randomly assigned 1566 fetuses from women who were expected to deliver before 30 weeks of gestation to either immediate clamping of the umbilical cord (≤10 seconds after delivery) or delayed clamping (≥60 seconds after delivery). The primary composite outcome was death or major morbidity (defined as severe brain injury on postnatal ultrasonography, severe retinopathy of prematurity, necrotizing enterocolitis, or late-onset sepsis) by 36 weeks of postmenstrual age. Among preterm infants, delayed cord clamping did not result in a lower incidence of the combined outcome of death or major morbidity at 36 weeks of gestation compared to immediate cord clamping.

# INA Articles of Interest

Impact of the neonatal resuscitation program—recommended low oxygen strategy on outcomes of infants born preterm

Kapadia VS, Lal CV, Kakkilaya V, et al. J Pediatr. 2017 Dec;191:35-41

In this retrospective study of 199 preterm infants <28 weeks' gestation, 110 were resuscitated with 100% O2 (HOX) and 89 were resuscitated with 21% O2 and titrating to meet NRP—recommended transitional target oxygen saturations (LOX). Subjects in the LOX group had lower O2 exposure in the delivery room, spent fewer days on O2, had lower odds of developing BPD, and had greater motor composite scores on Bayley Scales. No difference in mortality was noted between HOX and LOX groups. Prospective studies are needed to confirm these findings.

Abstention or intervention for isolated hypotension in the first 3 days of life in extremely preterm infants: association with short-term outcomes in the EPIPAGE 2 cohort study

Durrmeyer X, Marchand-Martin L, Porcher R, et al. Arch Dis Child Fetal Neonatal Ed. 2017 Nov;102(6):490-496.

In an analysis of the EPIPAGE-2 population based cohort of 60 NICUs in France in 2011, investigators evaluated the association between treatment for hypotension (fluid bolus, inotropes or corticosteroids) and survival to hospital discharge without major morbidity. Infants who received treatment for hypotension (n=131), compared to untreated infants (n=325), had a higher rate of survival without major morbidity (61.3% vs 48.7%; OR, 1.67, 95% CI 1.00 to 2.78, p=0.049).

<u>Diagnostic accuracy of neonatal assessment for gestational age determination: a systematic review</u> Anne CC Lee, MD *Pediatrics. 2017 Dec;140(6).* 

Efforts in low- and middle-income countries should focus on improving dating in pregnancy through ultrasound and improving validity in growth-restricted populations. Where ultrasound is not possible, increased efforts are needed to develop simpler yet specific approaches for newborn assessment through new combinations of existing parameters, new signs, or technology.

Early Mortality and Morbidity in Infants with Birth Weight of 500 Grams or Less in Japan HirosukelnoueMD, PhD J Pediatr. 2017 Nov;190:112-117.e3.

Improvements in perinatal-neonatal medicine have improved the survival, but not the rate of major morbidities, of infants with a BW ≤500 g in Japan.

Outcomes of Preterm Infants following Discussions about Withdrawal or Withholding of Life Support (WWLST). Jennifer James, MD J Pediatr. 2017 Nov;190:118-123.e4.

Wide center variations in WWLST discussions occur, especially at ≤24 weeks GA. Outcomes of infants surviving after WWLST discussions are poor.

# INA Articles of Interest

Mortality in infants affected by preterm birth and severe small-for-gestational age birth weight Joel G. Ray, MD Pediatrics. 2017 Dec;140(6).

A completed population-based cohort study within the province of Ontario, Canada, from 2002 to 2015. Included were 1 676 110 singleton hospital live births of 23 to 42 weeks' gestation. Modified Poisson regression compared rates and relative risks of neonatal mortality among those with (1) preterm birth at 23 to 36 weeks' gestation and concomitant severe small for gestational age (PTB-SGA), (2) PTB at 23 to 36 weeks' gestation without severe SGA, (3) term birth with severe SGA, and each relative to (4) neither. Relative risks were adjusted for maternal age and stratified by several demographic variables. Methods to detect or prevent PTB or SGA should focus on PTB-SGA, which serves as a useful perinatal surveillance indicator.

<u>Survival in very preterm infants: an international comparison of 10 national neonatal networks</u> Helenius K, Sjörs G, Shah PS, et al. *Pediatrics*. *November 2017; Vol. 140 (6)* 

The network ranking of survival rates for very preterm infants remained largely unchanged as GA increased; however, survival rates showed marked variations at lower GAs. The median age at death also varied among networks. These findings warrant further assessment of the representativeness of the study populations, organization of perinatal services, national guidelines, philosophy of care at extreme GAs, and resources used for decision -making.

<u>Caffeine therapy—when and why?</u> <u>Alan H.Jobe MD, PhD</u> *J Pediatr. 2017 Nov;190:2* 

Caffeine therapy for very preterm infants was developed as a very effective therapy for apnea of prematurity. The CAP trial (*N Engl J Med* 2006;354:2112-2121) and the follow-up reports of the patients demonstrated that caffeine therapy started on average at 3 days of age decreased bronchopulmonary dysplasia and had no adverse effects on long-term outcomes. The patients in the trial were randomized to caffeine primarily for the indications of apnea of prematurity or anticipated extubation. Patel et al now report on caffeine use from 2000 to 2014 in over 11 000 preterm infants to address the questions does early "preventive" caffeine begun on the first day of life decrease early respiratory failure for infants on continuous positive airway pressure (CPAP) and changed outcomes? The secular trend for first day early "prophylactic" use of caffeine increased from 22% in 2000 to 67% of patients in 2014 in this database. However, early caffeine therapy did not decrease CPAP failure or complications such as BPD. Caffeine is considered by some clinicians as drug to improve lung and brain outcomes. There is a treatment creep to use caffeine in the delivery room or very early after delivery without the clinical indication of apnea of prematurity. Higher doses also are being given. A conservative position is to only use any drug for sound indications, particularly in very preterm infants. Those indications for caffeine are apnea of prematurity and facilitation of extubation. The epidemiology in this report from Patel et al supports caffeine use for indication and not for early prophylactic use.

# INA Articles of Interest

<u>Inotropes for preterm babies during the transition period after birth: friend or foe?</u>
<u>Heike Rabe, MD</u> *Arch Dis Child Fetal Neonatal Ed. 2017 Nov; 102 (6): F547-F550.* 

During the transition to extrauterine life, preterm infants are at high risk of developing circulatory failure. Currently, hypotension is used as major diagnostic criteria for starting treatments such as fluid boluses, inotropes or steroids. Most of these treatment options have not been studied in large randomised controlled trials for efficacy and safety and are under discussions. A wide variety in their use is reported in the literature and clear evidence about which inotrope or other treatment should be preferred is lacking. In addition, there is ongoing debate about the appropriate threshold values for blood pressure. Other diagnostic measures for poor circulation are functional echocardiography, near-infrared spectroscopy, capillary refill time, base excess and serum lactate. Large randomised controlled trials for the use of dopamine and dobutamine in preterm infants <32 weeks gestation are under way to fill the knowledge gaps on the assessment of circulatory compromise and on efficacy and safety of the studied age-appropriate drug formulations. https://www.ncbi.nlm.nih.gov/pubmed/28818851

<u>Variation of practice and poor outcomes for extremely low gestation births: ordained before birth?</u>

<u>Annie Janvier, MD</u> *Arch Dis Child Fetal Neonatal Ed. 2017 Nov; 102 (6): F470-F471.* 

Changes in philosophy require more than hard work. With pessimism and negative language, the story can become a self-fulfilling prophecy. Parents demand (and expect) that we are critical of our results, and committed to change the way healthcare providers view and treat extremely preterm infants.

Impact of Prolonged Mechanical Ventilation in Very Low Birth Weight Infants: Results From a National Cohort Study. Young-Bin Choi, MD J Pediatr. 2017 Dec.

Although mechanical ventilation is a life-saving intervention for premature infants, these results indicate that it is associated with negative consequences when applied for prolonged periods.

Controversies in the identification and management of acute pulmonary hypertension in preterm neonates Regan E Giesinger, MD Pediatr Res. 2017 Dec; 82 (6): 901-914.

Though increasingly recognized as an important contributor to hypoxia and acute cardio-vascular instability, the optimum care for premature neonates with acute PH remains poorly understood and contro-versial. It is a complex and heterogeneous disease that requires a high index of suspicion to identify and meticulous attention to detail to optimize management. Enhanced understanding of physiology may aid in the interpretation of conflicting literature and should inform clinical practice. Appropriate patient selection is of paramount importance, as there is likely a population of preterm neonates who benefit from iNO as an acute rescue therapy after alveolar aeration and recruitment strategies are optimized. Comprehensive TnECHO evaluation may provide an enhanced understanding of mechanism of disease, facilitate earlier identification of a target population where early intervention may be beneficial, and exclude confounding illnesses (e.g., CHD, LV dysfunction) where non-judicious use of iNO or alternative pulmonary vasodilators may be harmful. A thoughtful, physiological, and targeted approach to therapy may improve patient outcomes and provide direction for future clinical trials.

# INA Articles of Interest

<u>Dual-strain probiotics reduce NEC, mortality and neonatal bloodstream infections among extremely low birthweight infants</u>

Luisa Anna Denkel, MD Arch Dis Child Fetal Neonatal Ed. 2017 Nov; 102 (6): F559-F560.

Berrington and Ward Platt recently summarised current advances in the management of preterm infants born <1000 g, so-called extremely low birthweight (ELBW) infants. In this thoroughly done review, the authors highlighted the findings of the 2014 Cochrane review showing probiotics to reduce all-cause mortality and necrotizing enterocolitis (NEC) in preterm infants, but not in the subgroup of ELBW infants. They hypothesised the lacking protective effect in this extremely vulnerable population to be attributable to their general immaturity, the timing of probiotic exposure or the small sample size of only 575 ELBW infants analysed. Another recent meta-analysis did not show a significant beneficial effect of probiotics on sepsis in 771 ELBW infants included. This demands further studies with adequate power on the use of probiotics in infants born <1000 g. Almost at the same time, we published a multicentre time series analysis supporting the beneficial effects of dual-strain probiotics on NEC, overall-mortality and nosocomial bloodstream infections (BSI) in preterm infants. Beyond that, we performed a subgroup analyses with 4683 ELBW infants. Routine use of dual-strain probiotics significantly reduced the risk of NEC (HR 0.48, 95 % CI 0.36 to 0.64), overall mortality (HR 0.59, 95 % CI 0.41 to 0.84) and nosocomial BSI (HR 0.83, 95 % CI 0.74 to 0.94) in this cohort. Further, probiotics also protected ELBW infants from mortality following NEC (HR 0.40, 95 % CI 0.19 to 0.85). Up to date, this is the largest study on probiotics in ELBW infants. Our findings suggest the routine use of dual-strain probiotics in standard neonatal care of infants born <1000 g.

Predicting mortality or intestinal failure in infants with surgical necrotizing enterocolitis Darshna Bhatt, MHA, DO J Pediatr. 2017 Dec; 191:22-27.e3.

Preoperative prediction of death or intestinal failure among infants with surgical NEC is possible using existing prediction tools and, to a greater extent, using a newly proposed 4-variable hybrid model.

#### <u>Identification of Extremely Premature Infants at Low Risk for Early-Onset Sepsis</u>

Karen M. Puopolo, Sagori Mukhopadhyay, Nellie I. Hansen, et al. Pediatrics November 2017, VOLUME 140 / ISSUE 5

Delivery characteristics of infants born at 22 to 28 weeks GA were useful in identifying those with significantly lower risk of EOS. Prolonged early antibiotics were administered to a large proportion of these infants despite their lower a priori risk, and this was associated with higher adjusted incidence of death and pulmonary morbidity. Recognition of differential EOS risk may help guide early empirical antibiotic use among approximately one-third of extremely preterm infants.

# INA Articles of Interest

How to feed a baby recovering from necrotising enterocolitis when maternal milk is not available.

Nicholas D Embleton, MD Arch Dis Child Fetal Neonatal Ed. 2017 Nov; 102 (6): F543-D546.

Necrotising enterocolitis (NEC) is a devastating disease with significant mortality and serious adverse outcomes in at least 50% including short gut and poor neurodevelopment. Research and management are complicated by a lack of robust clinical markers, and without histological confirmation, there is a risk of both underdiagnosis and overdiagnosis. Interunit variations in the thresholds for surgical referral, laparotomy and postmortem rates mean the actual incidence is difficult to determine, especially because the histological term 'NEC' is used in practice to describe a heterogeneous clinical syndrome. In this article, we discuss issues relating to choice of milk feed type following a clinical diagnosis of 'NEC' where mother's own milk is not available. We review common clinical concerns relating to feeding following NEC and the rationale for modifications of the macronutrient composition and quality of formula milk.

Effect of prophylactic indomethacin administration and early feeding on spontaneous intestinal perforation in extremely low-birth-weight infants

Stavel M, Wong J, Cieslak Z, et al. J Perinatol. 2017 Feb;37(2):188-193.

In a multicenter, retrospective cohort study of 4268 extremely low birth weight infants from Canada, investigators evaluated the association between prophylactic indomethacin, early enteral feeding and risk of spontaneous intestinal perforation (SIP). Compared to infants who did not receive prophylactic indomethacin, infants who received prophylactic indomethacin had an approximately 2.5 fold higher odds of SIP. Early feeding was not associated with a higher or lower risk of SIP.

<u>Feasibility and safety of controlled active hypothermia treatment during transport in neonates</u> with hypoxic-ischemic encephalopathy

Szakmar E, Kovacs K, Meder U, et al. Pediatr Crit Care Med. 2017 Dec; 18(12): 1159-1165.

This cohort study compared 136 newborns with moderate-to-severe hypoxic-ischemic encephalopathy who were actively cooled during transport to 78 historic controls treated with standard transport intensive care. The authors found that for the group who received active cooling, the target temperature of 33-34°C was achieved 1.83 hours earlier (median 2.42 [1.58-3.63] vs 4.25 [2.42-6.08] hours after birth, respectively; p < 0.0001) with no increase in adverse events leading to pulmonary or circulatory failure. The authors concluded that therapeutic hypothermia during transport is feasible and safe, allowing for significantly earlier initiation and achievement of target temperature, possibly providing further benefit for neonates with hypoxic-ischemic encephalopathy.

# INA Articles of Interest

Effect of inhaled nitric oxide on survival without bronchopulmonary dysplasia in preterm infants: A randomized clinical trial

Hasan SU, Potenziano J, Konduri GG, et al. JAMA Pediatr. 2017 Nov 1; 171 (11): 1081-1089.

451 neonates < 30 weeks gestation and birth weight < 1250 gms, receiving mechanical ventilation or positive pressure support on postnatal days 5 - 14, underwent a RCT to evaluate the use iNO for a period of 24 days compared to placebo. iNO use appeared to be safe but did not improve survival without BPD at 36 weeks PMA or respiratory and neurodevelopmental outcomes at 18-24 months PMA.

Neurodevelopmental follow-up for high-risk neonates: current practice in Great Britain Philippa Chisholm, MD Arch Dis Child Fetal Neonatal Ed. 2017 Nov; 102 (6): F558-F559.

Throughout Great Britain, there is recognition of the need for neurodevelopmental follow-up and 64% of those who replied have a dedicated service. It is probable that those with an existing service were more likely to respond to the survey and the true percentage of units performing neurodevelopmental follow-up may be lower. There is wide variation in existing services, including timely access to therapy. For many units, an informal screening occurs in a general follow-up clinic, with children being referred for a formal assessment only if concerns are raised, while others undergo formal assessments as part of developmental surveillance. As most services identify eligible infants by gestation and postcode, the difference in provision shows geographical variation. Financial constraints and availability of appropriately trained staff are given as reasons for lack of provision. In order to provide consistency for all families of children at high risk, standardisation of neurodevelopmental follow-up may be helpful, incorporating a structured approach allowing collection of outcome data as well as early diagnosis and intervention.

Effect of therapeutic hypothermia initiated after 6 hours of age on death or disability among newborns with hypoxic-ischemic encephalopathy: a randomized clinical trial.

Laptook AR, Shankaran S, Tyson JE, et al. JAMA. 2017 Oct 24: 318 (16): 1550-1560.

This Neonatal Research Network trial randomized 186 infants at 21 institutions who were born at ≥36 weeks gestation with moderate to severe encephalopathy to therapeutic hypothermia starting at 6 to 24 hours after birth or noncooling. The authors found that hypothermia initiated at 6 to 24 hours after birth compared with noncooling resulted in a 76% probability of any reduction in death or disability, and a 64% probability of at least 2% less death or disability at 18 to 22 months.

# INA Remembrance



### A Tribute to Dr. Jerry Lucey

Teacher, mentor and colleague

We report with great sadness that Jerold F. Lucey, MD, Professor Emeritus of Pediatrics at the University of Vermont College of Medicine and a founder of Vermont Oxford Network, passed away on December 10, 2017 at the age of 91 after a brief illness. His extraordinary achievements as a clinician, scientist, editor and educator have transformed the fields of pediatrics and neonatology and contributed to the health and well-being of children and families around the globe.

Throughout his distinguished career, Dr. Lucey identified promising new therapies and diagnostic techniques, and subjected them to rigorous testing. In 1968, he conducted a landmark randomized trial of phototherapy for neonatal jaundice which led to its widespread adoption in the practice of newborn medicine. He played a critical role in

organizing the early clinical trials of exogenous surfactant therapy for the treatment of neonatal respiratory distress syndrome, another landmark in the treatment of premature infants. He was a pioneer in applying transcutaneous oxygen monitoring in neonatal intensive care, and played a major role in organizing trials of hypothermia for the prevention of neonatal hypoxic-ischemic encephalopathy. He was a catalyst and facilitator for bringing new ideas from the laboratory to the bedside.

As head of the American Academy of Pediatrics Fetus and Newborn Committee from 1966 to 1972, he played a critical role in promoting the concept of regionalization of perinatal care. In 1980, Dr. Lucey started Hot Topics in Neonatology, an international meeting of neonatologists that has become a model of how new clinical ideas can be subjected to rigorous scientific scrutiny in a public forum.

Dr. Lucey served as Editor in Chief of *Pediatrics*, the official journal of the American Academy of Pediatrics, for over 30 years. Under his leadership, the journal became an internationally recognized forum for the highest quality scientific research and public debate of issues in child health. His own acclaimed editorials have frequently broken important new ground and inspired others to action.

One of Dr. Lucey's most important contributions to the field of neonatal medicine was the establishment of the Vermont Oxford Trials Facilitation Service. Following a sabbatical at the National Perinatal Epidemiology Unit in Oxford, England with Ian Chalmers in the late 1980s. He recognized the possibility of organizing a pragmatic trials network in the US. Vermont Oxford Network, and "Hot Topics in Neonatology" conference was developed from this initial idea and now has grown to become a worldwide community of practice including health professionals at more than 1200 neonatal units around the world.

Dr. Lucey was a gifted teacher. By personal example, lectures, ward rounds, and numerous visiting professorships, he directly influenced countless students and practitioners at all levels of training all around the world. Everyone who has been fortunate enough to experience Jerry's teaching will agree that his insight, intellect, and innovative ideas were an inspiration to their own work.

In recognition of his extraordinary contributions to pediatrics and neonatology,

he has been recognized with numerous prestigious professional awards including the John Howland Award, the highest honor given to an academic pediatrician who exemplifies distinguished service to pediatrics as a whole; the Virginia Apgar Award in Perinatal Pediatrics recognizing an individual whose career has had a continuing influence on the well-being of newborn infants; the AAP Lifetime Achievement Award; and the Lienhard Award of the Institute of Medicine, which recognized his application of medical technologies and procedures which have helped save millions of lives.

Our worldwide community of practice dedicated to providing every newborn infant and family with the best possible and ever improving care is a lasting testament to Dr. Jerry Lucey's vision.

We and the pediatrics and neonatology community will miss Dr. Lucey greatly. Please convey our deepest sympathies to Dr. Lucey's family and friends.

Respectfully submitted by Arun K. Pramanik, MD
With permission of: Jeffrey D. Horbar, MD
[Jerold F. Lucey, MD Professor of Neonatal Medicine University of Vermont
Chief Executive and Scientific Office Vermont Oxford Network]







Congratulations to Our 2017 INAC Abstract Winners

Oral Presentation Winners
1st Prize—Siba Prosad Paul
2nd Prize—Nicholus Nanyeenya

E-Poster Winners
1st Prize—Lindsey Rowley
2nd Prize—Aleksandra Matic



The 3<sup>rd</sup> International Neonatology Association





We look forward to Welcoming You to INAC 2018 in Ghent, Belgium!!!

# Calendar of Events



March 21-22, 2018 16th Annual World Congress on Pediatrics New York, USA

April 3-7, 2018 Snowbird, Utah, USA Advances in Critical Care of Neonates and Children (

May 5-8, 2018 **Pediatric Academic Societies Meeting** Toronto, Canada

May 30-31, 2018 21st Annual Congress Neonatology & Pediatrics Osaka, Japan

June 22-24, 2018 4th International Conference in Neonatology Ghent, Belgium

June 27-28, 2018 17th Annual World Congress on Neonatology Vancouver, Canada

July 16-17, 2018 21st Global Summit on Pediatrics, Neonatology & Primary Care Dubai, UAE

August 16-17, 2018 11th World Pediatric Congress Singapore

November 12-13, 2018 International Conference on Maternal Fetal Neonatal Medicine Dubai, UAE





## Membership Announcement



The INA membership application form is now available on the website link

Http://worldneonatology.org/membership-application-form.html

Kindly visit it and fill it. We would also request you to promote the membership throughyour neonatal/pediatric society, and any other society that you are familiar with.