INA Newsletter

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International Neonatology Association

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Message from President





The third annual meeting of the International Neonatal Association held in Lyon France was well organized and attended by delegates from several countries. The meeting planning committee had put together an outstanding program with headline speakers from all parts of the globe.

Because of its importance a significant portion of the conference was devoted to nutrition, and Dr. Jean-Charles Picaud, conference Chair, planned an outstanding preconference on human milk banking in addition to other topics of interest to practicing neonatologists. Included amongst these were the long term impact of early nutrition which was addressed by Professor Neena Modi,

the President of the Royal College of Pediatrics. The challenge of global neonatal mortality and morbidity was tackled by Professor Wally Carlo from the USA who provided insights on how to save a million babies using simple, readily available techniques with emphasis on education. Professor Andrew Ewer, University of Birmingham, UK and Professor Daniell DeLuca, France discussed use of pulse oximetry in screening critical congenital heart defects. Dr. Jose Honold presented information on whole genome sequencing. Dr Jucille Meneses, an expert from Brazil on the Zika Virus epidemic discussed the devastating birth defects associated with it and its long-term sequel. An expert panel on respiratory disorders with Professors Luna, Hascoet, Carlo, Jain, and Bassler dealt with current ventilator and oxygen management together with the role of antenatal and postnatal steroids (inhaled) as well as surfactant therapy. Dr. Kacheria from the USA discussed the latest views on placental transfusion and resuscitation used in low resource settings. Professor Hammerman from Israel provided insights into management of the patent ductus arteriosus, and jaundice in the newborn. Viral infections, and the importance of antibiotic stewardship were also discussed.

Sixteen abstracts were presented. First prize winner was Siba Prosad Paul and Second Prize was Nicholus Nanyeenya. Eighty-eight E-posters were submitted and the First prize winner was Lindsey Rowley and Second Prize winner was Aleksandra Matic.

The conference provide an ideal venue to interact with colleagues throughout the world. In 2017, we had delegates from over 70 countries. I personally look forward to welcoming you to the 2018 INA to be held in Ghent, Belgium, June 21-23, 2018.

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

Sincerely

Avroy A. Fanaroff, M.D. President INA Eliza Henry Barnes Chair of Neonatology and Professor Emeritus, Pediatrics Case Western Reserve University

INA 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,

Thank You for Attending the International Neonatology Association Conference 7-9 July 2017, Lyon, France.

It was a great pleasure to have you all in Lyon for the third INAC meeting.

It was a very rich meeting, because of the quality of the talks, and due to the wealth of exchanges. Questions from the audience were very diverse contributing to the quality of debates. We are delighted that the atmosphere allowed for fruitful exchanges between the participants thus contributing to the improvement of cordial relations between neonatologists from different countries and continents.

We also hope that you were able to enjoy the city of Lyon.

Hope to see you at the next INAC meeting in 2018.

Professor Jean-Charles Picaud, Chairman, Third INAC.



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



International Neonatology Association Board Meeting

8 July 2017, Lyon Convention Centre, Lyon, France

Attendees: Avroy Fanaroff, Lucky Jain, Franscis Mimouni, Mike Segall, Raid Umran, Manuel Sanchez Luna, Jean-Charles Picaud, Arun Pramanik, Ajay Gambir, Ashok Gupta, Jose Honold, Janine Koeries-Paragon, Eyal Halevy-Paragon.

Mohamed Bassiony (Egypt) was unable to attend because of unexpected visa issue. The meeting started with a welcome from Avroy Fanaroff who introduced Manuel Sanchez Luna as the incoming INA president. Points raised at the meeting are listed :

Item	Responsible
Prof. Jain proposed Professor Fanaroff be designated as Honorary President of the INA—this was accepted by the INA board present.	
INAC 2019	
Victoria Lima and her team from Mexico did a presentation for the 2019 Conference bid.	
Proposal to host conference in Mexico was approved by the board.	
Link to NAN website to be loaded to INAC and INA website as well the INAC newsletters.	Paragon
INA Newsletter A new newsletter committee was established to produce and INA news- letter twice a per year.	
Newsletter Committee: Arun Pramanik, Raid Umran, Jean Charles Picaud, Mike Segall, Jose Honold	Paragon/Arun Pramanik
Meeting adjourned with all board members in favor of both Ghent, Bel- gium and Tijuana, Mexico	
Follow up meeting to be held once Eyal Halvey has completed site visit to	Paragon/LOC

Respectfully submitted by Janine Koeries (Paragon)



Articles of Interest

Hearing Loss in Children With Asymptomatic Congenital Cytomegalovirus Infection

Lanzieri TM, Chung W, Flores M, et al. PEDIATRICS March 2017, 139, 3, e2016. In this case-control study, sensorineural hearing loss (SNHL), at age 18 years, 25% in patients with asymptomatic congenital CMV infectins, compared to controls [hazard ratio 4.0 (95% confidence interval 1.2, 14.5)]. However, the risk of developing SNHL after age 5 years among case-patients was not different than in uninfected children. Overall, 2% of case-patients developed SNHL that was severe enough for them to be candidates for cochlear implantation. Based on this and other studies, many experts recommend screening for CMV in patients who refer or fail newborn hearing screen.

<u>Effects of Prophylactic Indomethacin on Vasopressor-Dependent Hypotension in Extremely Preterm Infants.</u> <u>Liebowitz M, Koo J, Wickremasinghe A</u>, et al. J Pediatr. 2017 Mar;182:21-27.

This retrospective, double cohort controlled study examined infants delivered at <24+6 weeks' gestation (n=313) who were divided into two groups based on epoch. Group 1 (2004-2011) was treated with prophylactic indomethacin while group 2 (2011-2015) was not treated with indomethacin until after postnatal day 7. The authors found that the group treated with prophylactic indomethacin had a significantly lower incidence of vasopressor-dependent hypotension (11%) versus 21%) and required less mean airway pressure, had a lower respiratory severity score, and a lower mode of ventilation score. These results lost their significance when controlled for echocardiogramconfirmed moderate-to-large PDA, leading the authors to conclude that these effects were mediated by closure of the PDA.

MRI and spectroscopy in (near) term neonates with perinatal asphyxia and therapeutic hypothermia, Alderliesten T, deVries L, Staats L, et al. Arch Dis Child Fetal Neonatal Ed 2016;O:F1-F6.

In 88 infants > 36 weeks gestational age with perinatal asphyxia and therapeutic hypothermia, low apparent diffusion coefficient (ADC) values and high lactate/N-acetylaspartate (Lac/NAA) ratios on diffusion weighted MRI (DW-MRI) and proton magnetic resonance spectroscopy (H-MRS) of the basal ganglia and thalamus were associated with increased incidence of death or adverse neurodevelopmental outcomes at > 24months.

Treatment of subclinical Hypothyroidism or Hypothyroxinemia in Pregnancy

Casey BM, Thom EA, Peaceman AM, et al. N Engl J Med 2017; 376:815-825.

In two paired multicenter trials at 15 US centers, 677 women with subclinical hypothyroidism and 526 women with hypothyroxinemia were randomized to treatment with levothyroxine or placebo and their children underwent neurocognitive testing up to 5 years of age Levothyroxine treatment was started at a mean gestational age of 17-18 weeks in both trials. There were no significant differences in neurocognitive or pregnancy outcomes among women with subclinical hypothyroidism or hypothyroxinemia who were treated with levothyroxine compared to placebo.

Burnout in the neonatal intensive care unit and its relation to healthcare-associated infections.

Tawfik, DS, Sexton JB, Kan P, et al. J perinatal. 2017 Mar; 37(3):315-320.

Burnout is most prevalent among non-physicians, daytime workers and experienced workers. Perceptions of working too hard associate with increased HAIs in this cohort of VLBW infants, but overall burnout prevalence is not predictive.



Articles of Interest

Protecting the premature brain: current evidence-based strategies for minimising perinatal brain injury in preterm infants.

Lea CL, Smith-Collins A, Luyt K. Arch Dis Child Fetal Neonatal Ed. 2017 Mar;102(2):F176-F182

Improving neurodevelopmental outcome for preterm infants is an important challenge for neonatal medicine. The disruption of normal brain growth and neurological development is a significant consequence of preterm birth and can result in physical and cognitive impairments. While advances in neonatal medicine have led to progressively better survival rates for preterm infants, there has only been a modest improvement in the proportion of surviving infants without neurological impairment, and no change in the proportion with severe disability. The overall number of children with neurodisability due to prematurity is increasing. Trials investigating novel therapies are underway and many have promising early results; however, in the interim, current treatments and management strategies that have proven benefit for neurodevelopment or reduction in neonatal brain injury are often underutilised. We collate the evidence for the efficacy of such interventions, recommended by guidelines or supported by large meta-analysis or randomised control trials. We address controversies that have hindered uptake and problems with translating research into practice. We then look to the future of preterm neuroprotective care.

Efficacy of intravenous and endotracheal epinephrine during neonatal cardiopulmonary resuscitation in the delivery room.

Halling C, Sparks JE, Christie L, et al. J Pediatr. 2017 Jun;185:232-236

In a retrospective analysis of 56 infants from 2006 to 2014 who received epinephrine in the delivery room, it was determined that both 0.03 mg/kg and 0.05 mg/kg of endotracheal (ET) epinephrine failed to achieve return of spontaneous circulation (ROSC). In comparing ET and IV epinephrine, it was determined that the total dose and time required to achieve ROSC was greater in patients receiving ET epinephrine indicating that use of ET epinephrine should not delay the administration of IV epinephrine. For IV epinephrine, the lower dose of 0.01 mg/kg was found to be ineffective and authors recommend using the higher end of the dosage range (0.03 mg/kg).

The "golden age" of probiotics: a systematic review and meta-analysis of randomized and observational studies in preterm infants.

Dermyshi E, Wang Y, Yan C, et al. Neonatology. 2017;112(1):9-23

Over the last few years, probiotics have been one of the most studied interventions in neonatal medicine. The authors sought to analyze all studies (RCT and observational studies) assessing the use of probiotics in VLBW infants. Their meta-analysis found that the use of probiotics was beneficial for the prevention of severe NEC, late-onset sepsis, and all-cause mortality in VLBW infants.

Academic Performance, Motor Function, and Behavior 11 Years After Neonatal Caffeine Citrate Therapy for Apnea of Prematurity: An 11-Year Follow-up of the CAP Randomized Clinical Trial.

Schmidt B, Roberts RS, Anderson PJ, et al. JAMA Pediatr. 2017 Jun 1;171(6):564-572

In this study, infants from 14 centers enrolled in the Caffeine for Apnea of Prematurity trial underwent neurobehavioral follow-up at 11 years of age of age to assess academic performance, motor impairment and behavior problems. Among the 920 children evaluated, infants receiving caffeine, compared to infant receiving placebo, had similar rates of functional impairment (32% vs. 38%, adjusted odds ratio 0.78; 95% CI 0.59-1.02; P=0.07), as well as similar rates of poor academic performance and behavior problems. Infants receiving caffeine, compared to placebo, had a decreased risk of motor impairment (20% vs 28%, adjusted odds ratio 0.66; 95% CI 0.48-0.90; P=0.009). The authors concluded that at the doses used in the trial, neonatal caffeine therapy is effective and safe into middle school age.



Articles of Interest

Prophylactic Early Erythropoietin for Neuroprotection in Preterm Infants: A Meta-analysis. Fischer HS, Reibel NJ, Bührer C. Pediatrics. 2017 May;139(5).

To investigate whether prophylactic recombinant human erythropoietin (rhEPO) administration in very preterm infants improves neurodevelopment outcomes, the authors conducted a meta-analysis of four randomized controlled trials comprising 1133 infants. Prophylactic rhEPO improved the cognitive development of very preterm infants, as assessed by the MDI at a corrected age of 18 to 24 months, without affecting other neurodevelopmental outcomes. Current and future RCTs should investigate optimal dosing and timing of prophylactic rhEPO and plan for long-term neurodevelopmental follow-up.

Outcome of babies with no detectable heart rate before 10 minutes of age, and the effect of gestation. Sproat T, Hearn R, Harigopal S. Arch Dis Child Fetal Neonatal Ed. 2017 May;102(3):F262-F265.

This retrospective study evaluated 22 infants who received cardiac massage and had no heart rate before 10 minutes of life. Eight infants survived (6/11 term, 2/4 born between 32 to 37 weeks, and 0/7 born less than 32 weeks) and five had a normal neurodevelopmental outcome at 2 years' age. In conclusion, the authors state that particularly for term infants, it may not be appropriate to discountine resuscitation for infants with no heart rate before 10 minutes of age.

Association of Patent Ductus Arteriosus Ligation With Death or Neurodevelopmental Impairment Among Extremely Preterm Infants.

Weisz DE, Mirea L, Rosenberg E. JAMA Pediatr. 2017 May 1;171(5):443-449.

In this retrospective cohort study of preterm infants <28 weeks gestation from 2006-2012 with a hemodynamically significant patent ductus arteriosus (hsPDA) at 3 neonatal intensive care units in Canada, death or neurodevelopmental impairment (NDI) at 18 to 24 months was compared between infants who received surgical ligation compared to medical management of a hsPDA. After adjusting for both perinatal characteristics and potential confounders before ligation, surgical ligation was not associated with a lower or higher odds of death or NDI (aOR 0.83; 98% CI 0.52-1.32) but was associated with a lower odds of mortality (aOR 0.09; 95% CI 0.04-0.21). No differences in chronic lung disease or severe retinopathy of prematurity were seen when comparing the two treatment approaches for hsPDA.

Effectiveness of Vaccination During Pregnancy to Prevent Infant Pertussis.

Baxter R, Bartlett J, Fireman B, et al. Pediatrics. 2017 May;139(5). pii: e20164091

Vaccination against pertussis during pregnancy is recommended to protect newborns, yet there is limited information about the effectiveness of maternal tetanus toxoid, reduced diphtheria toxoid, acellular pertussis (Tdap) vaccine before the first infant dose of diphtheria, tetanus and acellular pertussis (DTaP) vaccine and during the first year of life in infants who have received DTaP.



Articles of Interest

Implementation of "Helping Babies Breathe": A 3-Year Experience in Tanzania.

Arlington L, Kairuki AK, Isangula KG, et al. Pediatrics. 2017 May;139(5), 2016-2132

This first-ever country-level study assesses the implementation of the Helping Babies Breathe (HBB) program in 15 of Tanzania's mainland regions by measuring coverage, adoption and retention of provider skills, acceptability among providers, and barriers and challenges to at-scale implementation.

Tidal Volume Delivery during the Anesthetic Management of Neonates Is Variable.

Abouzeid T, Perkins EJ, Pereira-Fantini PM. J Pediatr. 2017 May;184:51-56.e3.

A total of 26 neonates needing surgery under general anesthesia were studied, of whom 18 were intubated postoperatively. V_T was measured continuously during normal clinical care using a dedicated neonatal respiratory function monitor (RFM), with clinicians blinded to values. V_T , pressure, and cardiorespiratory variables were recorded regularly while intubated intraoperatively, during postoperative transport, and for 15 minutes after returning to the neonatal intensive care unit (NICU). In addition, paired V_T values from the anesthetic machine were documented intraoperatively.

<u>Prevalence of Concomitant Acute Bacterial Meningitis in Neonates with Febrile Urinary Tract Infection:</u> <u>A Retrospective Cross-Sectional Study.</u>

Wallace SS, Brown DN, Cruz AT. J Pediatr. 2017 May;184:199-203.

This was a retrospective cross-sectional study from 2005 to 2013 of infants \leq 30 days old evaluated in the emergency department of a quaternary care children's hospital with fever and laboratory-confirmed UTI. Definite ABM was defined as cerebrospinal fluid (CSF) culture with growth of pathogenic bacteria and probable ABM if pleocytosis with \geq 20 white blood cell was present in an antibiotic-pretreated patient. The timing of lumbar puncture and first antibiotic dose was recorded to assess for antibiotic pretreatment.

Nasal CPAP for neonatal respiratory support in low and middle-income countries.

Lissauer T, Duke T, Mellor K, et al. Arch Dis Child Fetal Neonatal Ed. 2017 May;102(3):F194-F196.

The use of nasal continuous positive airway pressure (NCPAP) for neonatal respiratory support is increasing in low and middle-income countries (LMICs). WHO recommends its use in preterm infants with respiratory distress syndrome. <u>1</u> Although the development of low-cost delivery systems has increased the availability of CPAP, it is not a simple intervention. Our experience of introducing NCPAP into LMICs including Rwanda, Malawi, Armenia, Papua New Guinea and other countries indicates that many issues need addressing for its successful introduction and use.

Initial stabilization of preterm infants: a new resuscitation system with low imposed work of breathing for use with face mask or nasal prongs.

Donaldsson S, Drevhammar T, Taittonen L, et al. Arch Dis Child Fetal Neonatal Ed. 2017 May;102(3):F203-F207

In the mechanical lung model, the new system reduced iWOB with 91.5% (mask) and 86.6% (medium prongs) compared with Neopuff (4 cm CPAP, p<0.001). Informed consent was obtained from 45 patients, 39 were randomised and 36 needed support. Randomisation resulted in an imbalance: The group of new system infants had lower gestational age compared with the T-piece group. Thirteen patients needed positive pressure ventilation (median 20 cm H₂O). One infant was intubated. The study did not reveal problems with the equipment or safety.



Articles of Interest

<u>Neonatal ventilation with a manikin model and two novel PEEP valves without an external</u> gas source.

Thallinger M, Ersdal HL, Morley C, et al. Arch Dis Child Fetal Neonatal Ed. 2017 May;102(3):F208-F213.

Positive end expiratory pressure (PEEP) is beneficial when ventilating preterm newborns. The aim was to study whether inexperienced providers were able to generate PEEP during simulated neonatal ventilation, using two novel prototype PEEP valves, on a self-inflating bag without an external gas source.

Effect of antibiotic use on antimicrobial antibiotic resistance and late-onset neonatal infections over 25 years in an Australian tertiary neonatal unit.

Carr D, Barnes EH, Gordon A, et al. Arch Dis Child Fetal Neonatal Ed. 2017 May;102(3):F244-F250.

Antibiotic resistance is a worldwide problem. We describe 25 years of responsible antibiotic use in a tertiary neonatal unit.

Establishing an integrated human milk banking approach to strengthen newborn care.

DeMarchis A, Israel-Ballard K, Mansen K, et al. Journal of Perinatology 2017, 37: 469-474.

The provision of donor human milk can significantly reduce morbidity and mortality among vulnerable infants and is recommended by the World Health Organization as the next best option when a mother's own milk is unavailable. Regulated human milk banks can meet this need, however, scale-up has been hindered by the absence of an appropriate model for resource-limited settings and a lack of policy support for human milk banks and for the operational procedures supporting them.

The prevalence of feeding problems in children formerly treated in a neonatal intensive care unit.

Hoogewerf M, Ter Horst HJ, Groen H, et al. J Perinatol. 2017 May;37(5):578-584.

Observational cohort study of 378 children, who received level III/IV NICU care for 4 days or more in 2011 to 2012, chromosomal abnormalities excluded. We detected feeding problems in four gestational age (GA) groups (<28, 28 to 31, 32 to 36 weeks, and term-borns) using the Dutch standardized Screeningslijst Eetgedrag Peuters, and collected clinical factors for logistic regression analyses.

World Health Organization (WHO)

Of 194 nations, no country in the world meets the recommended standards for breastfeeding rates, said the **World Health Organization** (WHO).

In a press release to announce both World Breastfeeding Week and to share the results of the Global Breastfeeding Scorecard, the WHO said that only 40% of children younger than 6 months are breastfed exclusively and only 23 countries have rates of exclusive breastfeeding of over 60%. In addition, they announced the release of the Global Breastfeeding Collective– a collaboration with UNICEF. They estimated that investing less than \$5 per newborn could potentially increase the exclusive breastfeeding rate for children under 6 months to about 50% by 2025. Besides increasing funding, the Global Breastfeeding Collective also called for stricter monitoring of breast milk substitutes, as well as more paid family leave and workplace breastfeeding policies.



Articles of Interest

How to Save 1 Million Lives in a Year in Low- and Middle-Income Countries.

Travers CP, Carlo WA. Neonatology. 2017;111(4):431-436.

Despite major improvements in reducing childhood mortality worldwide, over 5 million pregnancies per year end in stillbirths or neonatal deaths. The vast majority of these deaths occur in low- and middle-income countries. Many of these deaths are preventable with readily available evidence-based care practices. This review focuses on educational programs developed to reduce preventable deaths in newborn infants in low- and middle-income countries, including Essential Newborn Care and Helping Babies Breathe, a simplified version of the Neonatal Resuscitation Program. Innovative pragmatic large-scale trials conducted in the Global Network for Women's and Children's Health Research of the National Institutes of Health in the USA have evaluated these programs in low-resource settings. The results of these studies and the implications for future programs designed to decrease childhood mortality are reviewed.

Neonatal Genomics: Part 1—Basics and Definitions

Wojcik M, Parad R. NeoReviews 2017;18,e283

As genomic medicine is increasingly incorporated into clinical practice across all disciplines, an understanding of basic genetic concepts is important for the neonatologist. There are many different ways in which variations in the human genetic sequence, which comprises the genome, can lead to disease. Gene sequencing through the use of Sanger sequencing or next-generation sequencing technology can detect disease-causing variants and can be performed across the entire human genome in whole genome sequencing or across only the cod-ing regions of the human genome in whole exome sequencing.

Neonatal Genomics: Part 2—Applications

Wojcik M, Parad R. NeoReviews 2017;18,e295

The next-generation sequencing techniques described in Part 1 of this review can be used to sequence single genes, panels of genes, whole exomes, or whole genomes. These tests can be used for both diagnostic and screening purposes in the newborn nursery and NICU. As the cost and turnaround time for genetic testing decrease, the use of sequencing data will become more prevalent and can influence the diagnostic evaluation and care of the newborn. The use of genomic data for newborn screening is more controversial but also has potential usefulness in expanding the capabilities of current, predominantly analyte-based newborn screening algorithms. The incorporation of genomic information into the care of well newborns and ill NICU patients raises important ethical concerns that will need to be addressed as whole exome and whole genome sequencing become more routinely performed.

Delayed Umbilical Cord Clamping After Birth

American Academy of Pediatics: Available at: http://www.acog.org/ Resources-And-Publications/Committee-Opinions/Committee-onObstetric-Practice/<u>Delayed-Umbilical-Cord-Clamping-After-Birth.</u>

INA Fanaroff Young

Investigator Award, INA



INA is pleased to announce an award to recognize the most promising young investigator at its annual congress each year. The award draws inspiration from Dr. Av Fanaroff who is the founding President of INA, a lifelong academician, and an inspiration for us all.

Avroy A. Fanaroff, M.D. Professor Emeritus, Dr. "Av" Fanaroff was born and educated in South Africa. He joined Rainbow Babies and Children's Hospital as a fellow in Neonatology in 1969. He is a pioneer in Neonatology and has been recognized as such internationally. He has received many honorary degrees and awards including educational awards and the prestigious Apgar Award from the American Academy of Pediatrics. He served as chairman of the department of pediatrics from 2004 to 2008 after serving 23 years as Rainbow's Director of Neonatology. Dr. Fanaroff was a founding member of the NICHD Neonatal research Network and is globally acknowledged as an international authority in the field of neonatology, and has contributed greatly to literature in the area of neonatal medicine, with particular focus on pulmonology, nutrition, and sepsis. He served as editor of the Yearbook of Neonatology for 30 years and is co-editor of Neonatology at a Glance now in its third edition. He is co-editor of Fanaroff and Martin's Neonatal-Perinatal Medicine, 11th Edition and Klaus and Fanaroff's Care of the High-Risk Neonate edited by Fanaroff and Fanaroff, 7th edition in Progress. He served on the Board of University Hospitals Health System as well as on the Executive Committee of the Board of the American Board of Pediatrics. Amongst the thousands of physicians employed in the University Hospitals System he was the second physician to receive the annual "Physicians Recognition Award" for outstanding service to the hospital. He has also received an honorary fellowship from the Royal College of Pediatrics and Child Health in London and honorary doctorates from the University of the Witwatersrand (his alma mater) and the University of Turku, Finland.

We are delighted that this award will attract high caliber early career neonatologists from around the globe to participate in INA scientific deliberations each year.

Lucky Jain, MD INA Board Member

INANEWS



Congratulations to Our 2017 INAC Abstract Winners

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

<u>E-Poster Winners</u> 1st Prize—Lindsey Rowley 2nd Prize—Aleksandra Matic



Photo Gallery

The 3rd International Neonatology Association





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

INA Calendar of Events

September 16-19, 2017 National Annual Conference USA **AAP Section of Neonatal-Perinatal Medicine**

September 27-30, 2017 Dubai, UAE **Arab Neonatal Conference**

December 4-6, 2017 Neonatology and Perinatology: Challenges in Research Madrid, Spain

December 7-10, 2017 Gurgaon/Delhi, India **37th Annual Conference of National Neonatal Forum** (NEOCON)

December 10-13, 2017 Washington, DC, USA Hot Topics in Neonatology

January 4-7, 2018 Nagpur, Maharashtra, India 55th Annual Meeting of the Indian Academy of Pediatrics (PEDICON)

March 7-9, 2018 **International Neonatology Conference** Bangkok, Thailand



April 3-7, 2018 Snowbird, Utah, USA Advances in Critical Care of Neonates and Children (Formerly High Frequency Ventilation Conference)

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







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 through your neonatal/ pediatric society, and any other society that you are familiar with.