

INSIDE: FOOD FOR THOUGHT • LEGISLATIVE UPDATE • EDUCATIONAL OFFERINGS • BRING IT ON • LETTER FROM THE PRESIDENT • POCKET NOTEBOOK • BRAG BOARD AND MORE...

The Publication of the Florida Association of Neonatal Nurse Practitioners

# Management of Wolff-Parkinson-White in the Neonatal Population

Stephanie D. Chambers, BSN, RNC-NIC

### **Abstract**

**Purpose:** Wolff-Parkinson-White (WPW) is the most commonly diagnosed cause of ventricular pre-excitation with an estimated incidence of 0.1-0.2% in the neonatal population. The true incidence may be misrepresented secondary to missed or misdiagnosis. WPW originates as a congenital developmental defect of the cardiac conduction system with proliferation of extra embryologic electrical conduction pathways from the atria to the ventricles resulting in rapid conduction of electrical impulses through accessory conduction pathways. The purpose for this poster is to assist viewers with clinical manifestation recognition of WPW and to understand the significance of the underlying pathology to encourage prompt evaluation and treatment for a potentially fatal, but treatable disease.

Methods: A comprehensive literature review of evidence-based research was conducted using PubMed (2013 to 2019), CINAHL (2013 to 2019), and Google Scholar (2013 to 2019) computerized databases. Search inclusion criteria included (newborn OR infant), Wolff Parkinson White Syndrome, epidemiology, risk factors, pathogenesis, diagnosis, management, treatment, complications, and ventricular pre-excitation. The search was confined to the English language and human subjects. Once duplicates were removed, 267 references were identified. Abstracts were excluded if they did not focus on neonates and atrioventricular reentrant tachycardia. Thirty potentially relevant publications were selected and reviewed in full.

**Results:** Separation of the heart chambers begins around seven weeks' gestation with the entire process of fibrosis and isolation of the atrioventricular junction complete



after term gestation. The unknown influence of the external environment on the growth and development of the preterm infant's cardiac conduction system place this population at risk for persistent atrioventricular reentrant tachycardia (AVRT) with development of WPW. AVRT, the most common supraventricular tachycardic arrhythmia in neonatal and pediatric populations, creates a reentry circuit with retrograde conduction. Ventricular preexcitation with AVRT presents with a heart rate greater than 180 beats per minute, a narrow QRS complex, and 1:1 atrial to ventricular responses. An inexperienced practitioner may easily misdiagnose WPW due to the likelihood of AVRT with ventricular pre-excitation to imitate other arrhythmias. Careful detail must be taken, as the magnitude of an incorrect diagnosis could mean death.

**Limitations:** There is a paucity of literature related to neonatal WPW. This project is a review of the literature and not an original research project.

# Letter from the President

Hello everyone. I hope this letter finds everyone safe and healthy. As we approach our annual conference, I cannot help but reminisce about conferences past. I first attended the

conference in 2005 for the review course. It was so very helpful to serve as an adjunct to my academic classes to prepare for my NCC exam. I certainly encourage all students to participate in our VIRTUAL conference this year. The dates are October 13-16. That's right, due to COVID

19, we are going virtual! Although this conference will not look like any other, we are still putting together invaluable information and test review for you. There will be something for everyone, both novice students and seasoned NNPs. REGISTRATION IS OPEN!! Please visit our website at FANNP.org and send in your registration. Also, if you know any other NNP students who may not have heard about our review course, please spread the word! We will offer virtual exhibit halls, virtual and interactive poster presentations, and live, interactive Zoom events.

This is an election year for FANNP.

Nominations have closed, but voting members, look for your ballot to come via email. Please vote and make your voice heard. You are all very important parts of this organization.

Scholarships will be awarded during the conference. We have money set aside that we are anxious to give away to our wonderful members. Also grant applications are open year round. Send them in!

FANNP is always here to help advance education and professional opportunities for our

members. Please let us know if you need anything and if you have ideas to help us make this year better than it started.

Everyone, hang in there! This is an unprecedented time, but our conference will be legendary!

Sincerely, Gayla Kaye-Steed, MSN, NNP-BC President, FANNP





# FANNP Awards Scholarships at the Annual Conference

Scholarships are awarded annually at the October FANNP Symposium. FANNP as an organization is proud to be able to award scholarships of \$1000 - \$2000 to nurses and NNPs continuing their educational pursuits in the field of neonatal health care. Scholarship monies can be used for tuition, books or any expenses incurred while in school.

The scholarship recipients give back and provide a short article, case study, practice pointer, evidenced-based practice update or literature review which is published in the FANNP Newsletter for the membership to read.

All FANNP members pursuing a degree in neonatal health care are encouraged to apply for a 2021 scholarship. Please see the eligibility guidelines on the FANNP website and contact scholarships@fannp.org for an application.

### THE FLORIDA ASSOCIATION OF NEONATAL NURSE PRACTITIONERS

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# Conference Update

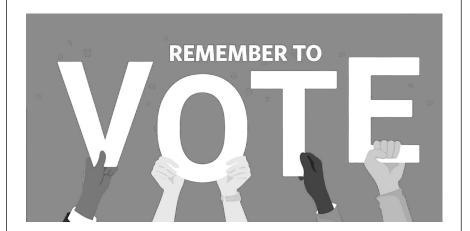
WOW is all I can come up with for this year!! Who would have known we'd be in the midst of a global pandemic?? Not me for sure! Well, as you most likely already know, the 31st Annual FANNP Symposium has gone virtual, and will be held October 13-16, 2020! Much blood, sweat, tears, and consideration was put into this decision. While we certainly realize this is very different than what we are used to, FANNP acknowledges the invaluable educational content our conference provides, and we are excited to share it with you!

As this platform is new to us, we quickly decided to go with what is tried and true, and have concentrated our efforts on the NNP Review Track. We have a great deal of exceptional information to present, along with an outstanding keynote speaker. In addition, many of you have decided to share your hard work through the Poster Session, and we can't wait to recognize your achievements! FANNP has looked into various ways we can feel connected as a group throughout this. I haven't figured out how to deal with the loss of beach time, however!! It sounds like it will be very exciting and possibly be the wave of the future, at least in a hybrid way!

Registration is up and running on the website at www.fannp.org, so take a look and let us know of any questions or concerns. Please contact conference@ fannp.org with questions you may have, or to get more information. Looking forward to "seeing" you in October!!

Thanks, Mary Kraus, MSN, NNP-BC FANNP Conference Chair





# **FANNP Board of Directors Nominations**

Thank you for your nominations for the January 2021-December 2022 Board of Directors positions! Brief biographies of candidates will be placed on the FANNP website soon for your review prior to voting electronically in October. FANNP voting members will receive a ballot via email. Our nominees are as follows:

Colleen Moss (President-elect)
Sheryl Montrowl (Treasurer)
Anecia Carter (Secretary)
Mary Beth Bodin (Member-at-large)

Amy Jnah (Member-at-large) Jacqui Hoffman (Member-at-large) Paula Timoney (Member-at-large) Harry Vannus (Member-at-large)



# Evaluation and Care of Neonates at Risk for Covid 19: CDC Guidelines

Submitted by Christa Smith, MSN, APRN, NNP-BC

- Route of Transmission: thought to occur primarily through respiratory droplets during the postnatal period. Clinical significance of vertical transmission, which is thought to be rare, is unclear. Insufficient data at present to make recommendations on routine delayed cord clamping or immediate skin-to-skin care for purposes of transmission reduction.
- Clinical Presentation: fever, lethargy, rhinorrhea, cough, tachypnea, increased work of breathing, vomiting, diarrhea, and poor feeding. Infection with Covid 19 in neonates is uncommon; the majority neonates are asymptomatic or present with mild symptoms.
   Symptoms can parallel common findings in the newborn period, such as with Transient Tachypnea of the Newborn (TTN).
- Testing: recommended for all neonates born to mothers with suspected or confirmed Covid 19, and those that are symptomatic (include rule out of other etiology). Reverse transcription PCR (RT-PCR) swab testing of oropharynx or nasopharynx is recommended method of testing. Test should be performed at 24 hours of age, and repeated at 48 hours if negative or not available. If asymptomatic and expected to discharge prior to 48 hours, a single test at 24-48 hours may be performed. Well newborns do not require results of testing prior to discharge.
- Infection Prevention: Rates of infection do not appear to be affected by mode of delivery, method of feeding, or contact with a mother with suspected or confirmed Covid 19. Mothers with suspected or confirmed Covid 19 and their neonates should be isolated away from healthy mothers and newborns, and cared for according to normal infectious protocol. Neonates born to suspected or confirmed Covid positive mothers that do not remain with the mother should be isolated from healthy newborns until test results obtained or discharged. NICU admission is not warranted, unless deemed necessary based on symptoms.

- Mother/Neonatal Contact: healthcare providers should respect maternal autonomy in decision-making regarding rooming in plans. Mothers with suspected or confirmed Covid 19 who has met criteria for discontinuation of isolation should not be considered higher risk of transmission to neonate. These criteria include at least 10 days since symptoms appeared (up to 20 days if severe), at least 24 hours since last fever without use of antipyretics, and symptoms have improved.
- Measures to Minimize Risk of Transmission: there is risk of respiratory secretions to newborn from mother, caregiver, or other person with Covid 19, therefore hand hygiene and mask wearing while caring for neonate are recommended. Plastic infant face shields and infant masks should not be used for infants <2 years of age. Physical distancing of >6 feet and/or use of incubator for rooming in neonates should be used when feasible. A healthy caregiver should provide care for the neonate when possible.

## References:

Evaluation and management considerations for neonates at risk for covid 19. (2020, August 3). Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-fornewborns.html





Submitted by Ally Kayton, MSN, APRN, NNP-BC

## Florida Legislation

The Florida Board of Nursing sent the following message to pass on to all APRNs: We are aware of a glitch in an email blast which the Department recently sent to APRNs advising them to renew by 8/31 or their licenses would be delinquent. This email inadvertently went to some APRNs who do not renew until 2021 or 2022. We regret the error.

The Legislation Session ended in Florida on its 60th day of 2020. In a normal year, this would be the last day. The budget would be voted on and the members would go back to their districts. However, this year the budget is still being negotiated. A number of reasons, including working on creating a funding source to combat Coronavirus, have caused the negotiations to continue. In addition, the Legislature will still end discussing policy bills, so anything not passed by midnight on this day will die.

House Bill 607 was passed by the Legislature, granting nurse practitioners the ability to independently operate without the supervision of a physician. In an extraordinary move, the bill was signed shortly after it passed by Governor Ron DeSantis. HB 607 allows qualified nurse practitioners to provide services such as family medicine, general pediatrics, and general internal medicine. Nurse practitioners who wish to practice independently from a doctor must have completed a minimum of 3,000 hours of supervised practice and would have to complete minimum graduate level coursework in differential diagnosis and pharmacology. Granting APRN's the freedom to practice on their own will ultimately improve Floridians' access to healthcare.

In light of recent events with the Coronavirus pandemic, there have been several cancellations to major sporting leagues, along with the U.S Capitol closure to the public. However, the Florida Capitol remains open as lawmakers proactively work on bills in the House and Senate chambers, along with the presence of elected officials, lobbyists, legislative and Capitol staff, and reporters. Legislative leaders are assuring the public that they are taking cautionary measures by setting money aside for response

efforts, and up to \$300 million is being reserved in the event of an economic downfall. Additionally, sanitation and health efforts are being taken to ensure a safe and clean environment. At this time, there has been no discussion in suspending session in its final days.

Florida is preparing for the upcoming elections to be held this year for presidential primary and local elections, and election officials are taking necessary steps to ensure the utmost security and privacy when it comes to public voting. Be sure to exercise your **RIGHT TO VOTE!** 

### Florida Bills

SB 66 Student Loans and Scholarship Obligations of Health Care Practitioners by Cruz; establishing that a health care practitioner's failure to repay a student loan or to comply with service scholarship obligations does not constitute grounds for disciplinary action; removing a civil fine; removing the requirement that the Department of Health investigate and prosecute health care practitioners for failing to repay a student loan or to comply with scholarship service obligations; removing the requirement, and related provisions, that the department immediately suspend the licenses of certain health care practitioners for failing to provide within a specified timeframe proof of new payment terms for student loans in default, etc.

Status: Died in Appropriations Subcommittee on Education.

HB 77 Student Loans and Scholarship Obligations of Health Care Practitioners by Goff-Marcil; provides that failure to repay specified student loan by health care practitioners is not considered failure to perform statutory or legal obligation; repeals language relating to health care practitioners in default on student loan or scholarship obligations; deletes provision relating to the immediate suspension of health care practitioner license upon default on specified student loan.

Status: Withdrawn prior to introduction.

**SB 204** Delivery of Nursing Services by Braynon II; Creating the "Florida Hospital Patient Protection Act"; requiring that each health care facility implement a staffing plan that provides minimum direct care registered nurse staffing levels; prohibiting a health care facility from assigning unlicensed personnel to perform functions or tasks that should be performed by a licensed or registered nurse; requiring a direct care registered nurse to initiate action or to change a decision or an activity relating to a patient's health care under certain circumstances; prohibiting a health care facility from interfering with the right of direct care registered nurses to organize, bargain collectively, and engage in concerted activity under a federal act, etc.

Status: Died in Health Policy.

**SB 230** Department of Health by Harrell; revising the purpose of patient care networks from serving patients with acquired immune deficiency syndrome to serving those with human

# **LEGISLATIVE** from page 5

immunodeficiency virus; requiring the Department of Health to develop strategies to maximize federal-state partnerships that provide incentives for physicians to practice in medically underserved or rural areas; revising term limits for Tier 3 cancer center designations within the Florida Consortium of National Cancer Institute Centers Program; requiring dentists and certified registered dental hygienists to report in writing certain adverse incidents to the department within a specified timeframe, etc.

Status: Approved by Governor. Effective Date: 7/1/2020

## Federal Legislative DEA Rule Change

- SUMMARY: The Drug Enforcement Administration (DEA) is adjusting the fee schedule for registration and reregistration fees necessary to recover the costs of its Diversion Control Program relating to the registration and control of the manufacture, distribution, dispensing, importation and exportation of controlled substances and list I chemicals as mandated by the Controlled Substances Act (CSA). This final rule adopts the notice of proposed rulemaking published on March 16, 2020, to change the fee schedule and codify existing practices of the issuance of refunds by DEA for applicant registration fees, without change.
- DATES: This final rule is effective October 1, 2020. The new fee schedule will be in effect for all new applications submitted on or after October 1, 2020, and for all renewal applications submitted on or after October 1, 2020.

### AANP Federal Resources and Advocacy

COVID-19 Resources and CE
Health care delivery continues
evolving to ensure that patients have
access to the primary, acute, and specialty
care they need during the COVID-19

pandemic. NPs can stay appraised of related legislative and regulatory changes, access the most current COVID-19 information, and discover telehealth tips and more with AANP's collection of COVID-19 recommendations for NPs at https://www.aanp.org/education/ce-opportunities/covid-19-recommendations-for-nurse-practitioners.

## **AANP Advocacy**

### 1. Modernize State Licensure Laws

One of the most important challenges facing patients and states is the accessibility of health care providers especially providers who serve in primary care and across the continuum of care. A solution to this challenge is direct access to NP-provided health care. Nearly half of the states, the District of Columbia and two U.S. territories currently provide patients with this level of access. In these states, NPs are authorized to evaluate patients, diagnose, order and interpret diagnostic tests and initiate and manage treatments—including prescribing medications—under the exclusive licensure authority of the state board of nursing. This licensure model is supported by decades of evidence and recommended by the National Council of State Boards of Nursing, the National Academy of Medicine, and other leading health policy experts. AANP is committed to working with states to update their licensure laws and provide patients with direct access to NPs.

# 2. Streamline Care Delivery with NP Signature Recognition

NPs treat more than a billion patients every year. Yet, in some states, inefficiencies occur when NPs are unable to "treat the paperwork" that reflects the care they have provided. AANP calls on policymakers to update policies to recognize the signature of NPs on forms for care that are within the NP scope of practice and to use provider-inclusive or provider-neutral language to prevent creating new challenges.

### 3. Flexible, Sustainable Reimbursement

### and Care Delivery Models

NPs are the fastest growing members of the primary care provider workforce and are the provider of choice for millions of Americans. Protecting a patient's right to choose a NP as their health care provider, and to have that care covered under their insurance plan, is a key priority for AANP. This includes supporting the enactment and enforcement of insurance laws for direct credentialing and reimbursement of NPs, ensuring that reimbursement rates promote sustainable practices and including NPs in network directories. As states experiment with and deploy new models of care delivery and reimbursement, policy decisions must include NPs as primary care providers and leaders of Accountable Care Organizations, Patient-centered Medical Homes and other coordinated care initiatives. Additionally, full and open participation for NPs in valuebased payment models, telehealth and facility governance will be critical as the health care system shifts to promoting integrative, coordinated care. AANP further calls for policies that ensure fair, competitive and level playing fields that support patient choice in providers, network adequacy, meaningful reporting measures and sustainability.

### 4. Build and Support Public Health

AANP continues to pursue evidencebased policy and practice solutions on a host of public health issues including access to safe pain care, substance use disorder treatment, immunizations, concussion care, cancer prevention and advancing preventative services and population health.

### References

https://fnpn.enpnetwork.com/nurse-practitioner-news/210661-practice-alert-dea-registration-fee-increase-effective-october-1-2020

https://www.aanp.org/advocacy/state/ state-policy-tracker

# EDUCATIONAL OFFERINGS

\*\*Check with individual conferences for changes or cancellations in light of Covid-19

### NANN 36th Annual Conference

October 21-23, 2020 \*Virtual Conference www.nann.org

# The 31<sup>st</sup> FANNP Neonatal Nurse Practitioners Symposium: Clinical Update and Review

October 13-16, 2020- VIRTUAL Review Course

www.fannp.org

# Medical University of South Carolina 2020 Neonatal Pharmacology Conference

November 11-13, 2020 \*Virtual Conference www.medicine.musc.edu

## **Hot Topics in Neonatology**

December 6-10, 2020 \*Virtual Conference www.hottopicsinneonatology.org

## **Neo Conference**

February 17-19, 2021 Caesar's Palace Las Vegas, NV www.neonconference.com

# Spring 2021 National Advanced Practice Neonatal Nurses Conference-Academy of Neonatal Nursing

April 21-24, 2021 Hilton Hawaiian Village Honolulu, Hawaii www.academyonline.org



# The American Academy of Nursing Welcomes New Fellow, Dr. Terri Marin!



published in the August 2020 edition of Advances in Neonatal Care for her article in conjunction with Dr. Bryan Williams, "Renal Oxygenation Measured by Near-Infrared Spectroscopy in Neonates". Congratulations again, Dr. Marin!

Marin, Terri PhD, NNP-BC, FAANP; Williams, Bryan L. PhD Renal Oxygenation Measured by Near-Infrared Spectroscopy in Neonates, Advances in Neonatal Care: August 05, 2020 - Volume Publish Ahead of Print - Issue -doi: 10.1097/ANC.000000000000000779

Congratulations to Dr. Terri Marin on being selected by the American Academy of Nursing to join the 2020 Class of Fellows! Dr. Marin joins 230 distinguished nurse leaders tapped to be inducted during the annual conference, taking place virtually in late October. Dr. Leslie Parker, FAAN class of 2018 and FANNP member, sponsored Dr. Marin for fellowship.

Fellows of AAN are chosen based on their significant contributions to health and health care, and the 2020 class represents 39 U.S. States, the District of Columbia, the U.S. territory of Guam, and 13 countries. The Academy is comprised of nursing leaders who are experts in policy, research, administration, practice, and academia that champion health and wellness, locally and globally.

The fellowship application process is rigorous, followed by a highly competitive selection process. Induction into the Academy is a significant milestone in a nurse leader's career and the most distinguished honor within the nursing profession. Congratulations Dr. Marin!

Additionally, Dr. Marin has just been



Congratulations also go to Dr. Colleen Moss for being honored with the Sara K. Archer Award at the Vanderbilt University School of Nursing. This award is given to faculty for outstanding contributions to student learning, and is voted on by NNP students. Way to go, Colleen!

Do you have a colleague, mentor, or student that you'd like to recognize for the Brag Board section of the newsletter? Or maybe you're the one doing some amazing work in the neonatal realm! Brag about it! Please email newsletter@fannp.org to share these accomplishments.

# WPW from page 1

Implications for Practice: Due to the rarity of WPW, any fetal or neonatal supraventricular tachycardia requires further evaluation with an electrocardiogram and involvement of an experienced cardiologist for diagnosis. One episode of supraventricular tachycardia warrants evaluation for WPW, as recurring episodes may result in irreversible damage. Electrophysiology studies are utilized as risk stratification diagnostic tools to determine the need for invasive catheter ablation procedures or when considering the discontinuation of antiarrhythmic medications; however, use is limited in the neonatal population. Original research is needed to understand the true incidence, physiologic effects, and lifespan implications for the neonatal population. Quality improvement initiatives that focus on creation of screening tools for WPW are essential for early diagnosis, prompt treatment modalities, risk stratification, and ultimately, prevention of sudden deaths in the neonatal population.

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# **POCKET NOTEBOOK**

Diane McNerney DNP, NNP-BC

# SCID Severe Combined Immunodeficiency

- **1. Definition-** Severe Combined Immunodeficiency (SCID) is a group of rare inherited disorders of the immune system that leads to recurring severe infections. Without effective treatment, SCID is usually fatal within the first 2 years of life.
- **2. Clinical Symptoms-** The defining characteristic is usually the onset of one or more serious infections within the first few months of life as a result of severe defect in both the T- & B-lymphocyte systems. These infections are often serious and may be life threatening. Children can also become ill from some vaccines that contain viruses. In children with SCID these viruses and bacteria may cause severe, life-threatening infections. Symptoms may be non-specific making diagnosis challenging.
- **3. Diagnostics-** The identification of infants with SCID through newborn metabolic screening allows for early diagnosis and optimal timing of treatment. There are several forms of SCID. The most common type is linked to the X chromosome, in which males are primarily affected. Other forms of SCID usually follow an autosomal recessive inheritance pattern or are the result of spontaneous mutations. One autosomal recessive form of SCID is linked to a deficiency of the enzyme adenosine deaminase (ADA) while other cases of SCID are caused by a variety of other defects in the genes.
- **4. Treatment-** Hematopoietic cell transplantation (HCT) known as stem cell transplant, can minimize the devastating effects of SCID, but needs to be done early in life. Mortality rates are high if treatment is delayed beyond the first 3-4 months of life. HCT from the bone marrow of a healthy donor can potentially cure an infant with SCID. It is the best option for patients with the disease. The best donors are healthy siblings, which may be rare. Other donors may include parents, close relatives or random donors with a good genetic match. The earlier a transplant is done, the better chance the child has for surviving SCID. Enzyme replacement therapy can help children with ADA SCID until other treatment options are available. Gene therapy is a treatment under investigation.
- **5. Prognosis-** Early diagnostics and treatment often results in a favorable outcome. Certain precautions should be taken with these children, such as, isolating infants with a confirmed diagnosis of SCID is important to protect them from life-threatening germs, breastfeeding mothers should be cleared of any exposure to certain infectious diseases, and healthcare providers should avoid giving children with SCID live attenuated vaccines, to improve outcomes. There is an 80% chance of survival with a successful HCT and children have a chance at a living a normal, healthy life. Without treatment, infants with SCID will not survive into childhood.

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# It's Time to Say Goodbye Pocket Notebook Readers

Almost 20 yrs ago I started the Pocket Notebook articles in the FANNP newsletter, but I will be saying goodbye after the December newsletter. The articles were meant as a "Quick 'n Dirty" list of neonatal problems to keep in your pocket until the NNP had time to do a more expanded search. I started my NNP career at Shand's NICU in Gainesville, FL when a fellow neonatologist suggested I

keep a notebook in my pocket that included information I could refer to if I needed a quick reference for these same reasons. I added to it everyday and used it often. It's been 25 yrs and I still have that notebook in my office drawer and occasionally refer to it. It's been a good run and I trust many new NNP's gained benefit from this information. I invite any NNP, fresh in their career, to pay-it-forward and create a similar database for their fellow neonatal colleagues.

Fondly,

Diane McNerney DNP/NNP-BC

# **FANNP Dates to Remember**

Event/Item	Date/Deadline of Event/Item
FANNP Grant	Ongoing
Poster Presentation Abstracts	July 15
Kim Nolan Spirit Award	July 15
Call for Nominations	July 15
FANNP Scholarship	Sept. 15
National Neonatal Nurses Day	Sept. 15
Annual National Neonatal Nurse Symposium: Clinical Update and	
NOW VIRTUAL!	Oct. 13-16, 2020
Nurse Practitioner Week*	Nov. 8-15, 2020
*Dates change annually	

# FANNP Newsletter Submission Calendar

Edition	Article Submission Deadline	Publish Date
Spring 2020	02/08/20	03/09/20
Summer 202	20 05/10/20	06/08/20
Fall 2020	08/09/20	09/07/20
Winter 2020	0 11/07/20	12/07/20

In addition to the core components of the newsletter, we would love to hear what you have to say! Please send in anything you would like to see added to the newsletter, whether it is an interesting article, a hot topic in the neonatal world, or even a shout out regarding a fellow FANNP member who is doing awesome things! We want to hear from you! Please submit following the above guidelines to newsletter@fannp.org.

\*\*Interested in helping with the editing of the newsletter?? Please email the above link!\*\*

# BRING IT ON ANSWERS from page 12

- 1. A Lipids supply essential fatty acids (EFA). Infants have decreased fat stores. Especially preterm infants, who have very limited endogenous lipid stores.
- 2. B Carbohydrates are a primary source of dietary energy in human diet with 40% -50% consumed by infants. Lactose is important, as it has been found to enhance absorption of calcium and magnesium. These are two essential minerals required by infants.
- 3. A Physiologic head compression occurs secondary to intact vagal reflex tone, which follows minor transient fetal hypoxic episodes. These are benign and mirror the contraction pattern.

# Calling for Research Proposals... FANNP Grants Available

Each year FANNP sets aside funds for the support of research projects. Applications for funding are reviewed by the Research Committee. The Research Committee makes recommendations to the Board of Directors on proposals received. Members of the Research Committee are appointed by the Board of Directors. The grant application period is rolling—there is no deadline for grant submission. Grants will be awarded within six weeks following submission, based on the Research committee and BOD decision.

Please visit www.fannp.org for more details

# The Kim Nolan Spirit Award... In Memory and Honor of Kim Nolan

The Kim Nolan Spirit Award is given annually to a NNP who exemplifies Kim's exuberance and "can-do" attitude in service to profession, community, and/or family. This award is a very prestigious honor! To read more about Kim visit www.fannp.org. Nominations were due July 15, 2020 and the winner will be announced at this year's FANNP Virtual Conference.



Kim Nolan



# Newsflash - FANNP Online

Get the latest news and updates from FANNP, including valuable virtual conference information at www.fannp.org.

Also, remember to join us on Facebook and follow us on Twitter and Instagram @FANNPorg. Be sure to tag us and let us know when you PASS YOUR BOARDS!!

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Questions? Contact Patricia Washington at patricia.washington@childrensMN.org or 952-992-5325.











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# Bring it On...



Practice Questions to Prepare for the NNP Certification Exam

- 1. Intra-lipids help prevent what type of deficiency in the infant?
  - a. Protein deficiency
  - b. Fatty acid deficiency
  - c. Caloric deficiency
- 2. The main carbohydrate source in human milk and term and preterm formulas is \_\_\_\_\_?
  - a. Dextrose
  - b. Lactose
  - c. Glucose
- 3. The fetal heart rate pattern associated with head compression

is \_\_\_\_\_?

- a. Early decelerations
- b. Variable decelerations
- c. Late decelerations

Answers on page 10

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