



**Neonatal  
Resuscitation  
Program®**

## **2023 Grant Application**

### **Introduction**

The overall objective of the NRP® grant program is to identify the best ways to optimize care in the delivery room using NRP. Successful grant applications will address key gaps related to transitional physiology, evidence-based resuscitation intervention, teaching and evaluating the cognitive, technical and behavioral skills necessary for successful resuscitation of the newborn and retention of skills and knowledge over time. Applications focused primarily on quality improvement initiatives or educational dissemination without a clear educational research focus will not be considered. Funding specifically for simulation supplies or development of a simulation center will not be considered.

***Please note the NRP grants should not be considered as a source of funding for implementation and dissemination of the Helping Babies Breathe Program or resuscitation in low resource settings.***

### **WHO CAN APPLY?**

Researchers from Canadian and US institutions are invited to apply for one of the four grant options to investigate the best ways to optimize care in the delivery room using NRP:

- **NRP Human Factors or Education Grant** (up to \$15,000): Any health care professional with an interest in the impact of human factors on delivery room resuscitation or optimization of NRP education
- **NRP Young Investigator Award** (up to \$15,000): Physicians-in-training or individuals within 4 years of medical training
- **NRP Research Grant Program** (up to \$50,000): Any health care professional with an interest in neonatal resuscitation
- **Jeanette Zaichkin NRP Nursing Grant for Excellence and Innovation in NRP Education** (up to \$10,000): A nurse or nurse practitioner who works in the delivery room or NICU. The recipient must also be a current NRP Instructor in good standing.

## Application Procedures

### There are two steps for applicants:

1. Potential applicants for an NRP grant must submit an abstract to the NRP Steering Committee by May 1, 2023. The abstracts will be reviewed and the committee will ask a select group of investigators to submit full proposals. Those selected will receive a full application form from the NRP Administrative Team on or before June 2, 2023.
2. Investigators with abstracts that are approved for a full application must submit the completed full application on or before August 1, 2023. Applicants will be informed of the decision regarding their application by November 1, 2023. Funds will be distributed in 2024.

Applicants can apply for no more than one grant each grant cycle. The application can be accessed here: <https://form.jotform.com/223085590936059>.

### Abstract Guidelines

The 1-page Abstract should include:

- The hypothesis of the study, including brief supporting background information. (What do you want to do and why?)
- The methods proposed for carrying out the project, including a rough timeline. (How are you going to do it?)
- How the results would be analyzed. (How will you figure out if the results are meaningful?)
- What impact this study would have on NRP. (How will your new knowledge improve NRP?)

### Budget Guidelines

Requests can include costs for supplies, minor equipment, and salaries for support personnel. Funds are not to be used for faculty salaries (including the primary investigator's) or indirect costs. Time and efforts of physician trainees or technical support can be included in the budget; however, the requested expense for their time must be clearly justified. Travel reimbursement is limited to local travel for research purposes and travel to locations with pertinent resources for the proposed study. IRB fees up to \$1,000 may be included in the budget.

Funding is for one year; however, a non-funded extension up to one year may be requested. All recipients are asked to provide publication information and updates one year following study completion.

Please note that all funds will be awarded to the applicant's institution.



# Neonatal Resuscitation Program<sup>®</sup>

## NRP Research Grant

### Eligibility

Any health care professional with an interest in neonatal resuscitation can submit a proposal for up to \$50,000 through the NRP Research Grant Program

### Key Topics and Questions of Interest

#### Topic: Placental Transfusion

##### Questions of interest

- What are the effects of different cord management strategies in the neonate who needs resuscitation?
- What is optimal timing of cord clamping particularly in the face of different maternal/fetal conditions (e.g., IUGR, congenital anomalies)?
- What is the impact of different cord management strategies on long-term neurodevelopmental outcomes?

#### Topic: Effective Delivery of Ventilation

##### Questions of interest

- What is the optimal method to use in safely and effectively establishing functional residual capacity (FRC) and assisting ventilation during resuscitation?
- When is the optimal time and circumstance to use the laryngeal mask during neonatal resuscitation?
- When administering positive-pressure ventilation (PPV) in the delivery room, should volume and/or pressure be measured? If volume is measured, what is the optimum volume to deliver as compliance changes while trying to establish a functional residual capacity (FRC) in a newborn?
- Is there a role for CPAP and PEEP to help in the stabilization of the spontaneously breathing term newborn?
- What is the role of respiratory function monitoring in the delivery room, including the use of exhaled CO<sub>2</sub> to guide ventilation efforts?

#### Topic: Use of Oxygen

##### Questions of interest

- What are the optimal goal saturation ranges for preterm infants needing resuscitation in the delivery room?
- How much supplemental oxygen should be used when there is persistently low heart rate despite 30 seconds of effective ventilation?
- What is the most effective method of titrating supplemental oxygen and respiratory support to optimize outcomes in babies born preterm and babies born at term?

#### Topic: Heart Rate Assessment

##### Question of interest

- What is the impact of use of ECG or other modalities for heart rate assessment on neonatal

outcomes and resuscitation team performance?

**Topic: Methods to Support Newborn Circulation (Chest Compressions, Medications)**

**Questions of interest**

- Is coordination of compressions and ventilations important?
- How can efficacy of chest compressions be best evaluated in the delivery room?
- What is the optimal ratio of chest compressions to positive-pressure ventilation breaths in neonatal resuscitation?
- When (i.e., at what HR) should chest compressions be initiated?
- What methods support circulation in addition to chest compressions (e.g., medications)?

**Topic: Use of Telemedicine in Neonatal Resuscitation**

**Question of interest**

- Does the use of telemedicine in neonatal resuscitation improve patient outcomes?

**Topic: Immediate Post Resuscitation Care**

**Questions of interest**

- What is the optimal temperature, glucose concentration, gas exchange parameters in the post-resuscitation period?
- How should we monitor a resuscitated infant post-delivery?

**Topic: Resuscitation for Special Considerations**

**Question of interest**

- How should newborn resuscitation techniques be adapted for special populations (e.g., congenital malformations)?

For background information or references to the science of NRP, please see: [2020 AHA Guidelines for CPR and ECC Part 5: Neonatal Resuscitation](#)



# Neonatal Resuscitation Program®

## NRP Young Investigator Award

### Eligibility

Physicians-in-training or individuals within 4 years of medical training can submit a proposal for up to \$15,000

### Key Topics and Questions of Interest

#### Topic: Placental Transfusion

##### Questions of interest

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## **NRP Human Factors or Education Grant**

### **Eligibility**

Any health care professional with an interest in the impact of human factors impact on delivery room resuscitation or optimization of NRP education

### **Topic: Optimization of NRP Education**

#### **Questions of interest**

- Are there new techniques of learning cognitive information, skills, or team performance that result in better retention of that learning over time?
- What are the most effective methods to improve team performance across disciplines (OB, Neonatologists, APPs, nurses, RTs, trainees, etc.)?
- What is the optimal way to measure individual and team performance during neonatal resuscitation?
- How can various educational methodologies, including RQI® for NRP®, be improved to enhance NRP knowledge skill acquisition, knowledge/skill retention, and delivery room resuscitation performance and patient outcomes?

### **Topic: Human Factors Impact on Delivery Room Resuscitation**

#### **Questions of interest**

- What features facilitate rapid and correct assimilation and interpretation of physiologic data streaming from patient monitors used during resuscitation?
- Does the use of scripts, technology, coaches, or "readers" improve compliance with NRP algorithm steps?
- What is the ideal team composition for the most effective resuscitation?
- How can documentation be improved for greater accuracy?
- Are pre-briefings and debriefings useful for improving individual and team performance?
- What are the physical factors in the DR environment that facilitate situational awareness and effective team performance?

For background information or references to the science of NRP, please see: [2020 AHA Guidelines for CPR and ECC Part 5: Neonatal Resuscitation](#)



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## **Jeanette Zaichkin NRP Nursing Grant for Excellence and Innovation in NRP Education**

This grant was created in recognition of the significant contributions to the Neonatal Resuscitation Program made by Jeanette Zaichkin, RN, MN, NNP-BC during her tenure as NRP Consultant from 1998-2022. Jeanette also served as Associate Editor of the *Textbook of Neonatal Resuscitation*, Editions 4 through 8 and Editor of the NRP Instructor Toolkit.

### **Eligibility**

A nurse who works in the delivery room or NICU in the United States or Canada who is also an NRP Instructor in good standing with an interest in neonatal resuscitation can submit a proposal for up to \$10,000

### **Topics of Interest:**

- What are the best methods to evaluate NRP Instructors' teaching performance during NRP Provider courses?
- How to best teach NRP Providers the basics of neonatal resuscitation
- How to effectively reinforce NRP skills throughout the two-year renewal cycle
- Methods for learning through innovative techniques such as AI, simulation, etc.
- How to enhance training through debriefing
- How to more effectively train and evaluate Instructor Mentors

For background information or references to the science of NRP, please see: [2020 AHA Guidelines for CPR and ECC Part 5: Neonatal Resuscitation](#)