Application for VUSN Faculty Scholarship Program

What is the VUSN Faculty Scholarship Program?
Internal funding is provided by the dean to support a scholarly program in either the area of teaching and learning or scholarly practice. Teaching and learning projects need to focus on innovations and/or new methods in teaching. Projects focusing on scholarly practice should align with VUSN research/scholarship areas such as: acute and chronic illnesses, pregnancy outcomes, mother and infant health and family health, innovations in practice models for implementation science, palliative care science, innovations in health technologies, cognitive health and disease and data science.

Who is eligible?
Applications are accepted from all non-tenure track VUSN faculty.

What are the Expected Outcomes?

- Primary
  - Change in clinical or teaching practice
  - Improvement initiative or clinical research project that advances faculty scholarship
  - Dissemination primarily through publications in peer reviewed journals

- Secondary
  - Professional meeting presentation
  - Clinical or teaching grand rounds
  - Meeting with Office of Corporate and Foundational Relations to identify future opportunities to sustain the teaching or practice innovation
  - Serving on the Faculty Scholarship Program Committee

Review and Funding Approval

- Review by Faculty Scholarship Program Committee
- VUSN Dean's Council for final approval of funding

For more information about the program and guidelines, please visit the Faculty Scholarship Program website.

Please select the program you wish to apply for:

- Scholarship in Teaching and Learning
- Scholarly Practice

For text boxes, you may copy and paste your statements or plans, or type directly into the text box. Text boxes will allow nearly unlimited characters, but please keep responses succinct to facilitate the review process.

Are you revising a previously submitted application?

- Yes
- No

Full Name (including credentials): Colleen Moss, DNP, APRN, NNP-BC

Email address: [Redacted]
**Project Title:** Evaluating the impact of a formalized mentoring program using the National Association of Neonatal Nurse Practitioners mentoring toolkit

**Abstract (30 lines of text maximum):**

In 2017, the National Association of Neonatal Nurse Practitioners (NANNP) recommended that organizations implement formalized mentoring programs for neonatal nurse practitioners (NNPs), but programs are not in place at many neonatal intensive care units (NICUs) in the United States. There is significant evidence to support that mentoring positively impacts nurse practitioners’ job satisfaction and retention. However, there is a lack of evidence-based literature specific to NNP mentoring.

The study is specifically designed to implement a mentoring program and assess outcomes for newly graduated NNPs and experienced NNPs working in a Level IV NICU. This mixed-methods study utilizes secure online surveys via email for data collection. The survey includes the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) and two intent-to-stay items for baseline measurement prior to mentoring program implementation. Eight NICU NPs (four experienced NNPs and four new hires) and two physician assistants (one experienced PA and one new hire) will meet monthly to complete mentoring toolkit activities. Data will be collected monthly to evaluate use and meaningfulness of these activities. Quantitative data include frequency and length of mentoring meetings, activities completed, and ratings of meaningfulness on a Likert-type scale. Qualitative data include personal and professional goals and mentoring needs. In July 2020, NICU NPs complete the same electronic survey to determine the impact of the mentoring program on job satisfaction and intent-to-stay.

**Purpose and Aims:**

*Describe the purpose of your project, the problem/issue you are addressing and the specific aims of your project and how the project aligns with VUSN priorities in the area of teaching or practice.*

This mixed-methods exploratory study will 1) determine the effectiveness of the NANNP mentoring toolkit in the establishment and evaluation of a formalized mentoring program, and 2) measure the impact of NNP participation in a formalized mentoring program to determine if job satisfaction and retention are improved.

**Background**

*What is known about your topic? What is unknown? How does your project fill either in teaching and learning or scholarly practice gap?*

Considering the impact that the NNP shortage has and will have on healthcare, creative solutions to address the problem are needed. Literature supports the value of establishing formalized mentoring programs for novice NPs to address challenges related to role transition and job satisfaction. The NANNP mentoring toolkit provides structure for formal relationship development. For successful transition to occur, experienced nurse practitioners (NPs) must possess an adequate skill set to provide support through mentorship that will positively impact job satisfaction during role transition. There are no published data regarding effectiveness of the NANNP mentoring toolkit activities, or the impact of the toolkit activities on mentoring relationships, job satisfaction, and retention for NNPs.
In 2020, the Vanderbilt NICU is expanding from 96 beds to ~117 beds. At the same time, there is an advanced practice provider (APP) vacancy rate of ~22% in the NICU. There are currently 7.5 open positions within the APP group, and the group expects to hire new NNPs to fill these open positions. It will be critical to provide ongoing mentoring training in order to match new NNP hires with experienced NNP mentor. The goals of the formalized mentoring program are to facilitate role transition, improve job satisfaction, and reduce attrition.

Relevance/significance

Indicate why the project is important and provide a clear link with the background section.

From the 2019 mentoring program data, it is known that NNP mentors are more satisfied in their current role than NNPs who do not participate as mentors. Mentoring program participants (both mentors and mentees) are more satisfied in their current position than non-participants. Measures to improve job satisfaction may increase intent to stay and positively impact retention.

The potential savings for the organization is improving retention. In 2018, the cost of onboarding a new NNP was $99,179 (K. Lebar, personal communication, February 13, 2019). This amount included the salary for the new NP in addition to overtime costs to cover open shifts during the orientation period. Between 2016 and 2019, an average of 8.7 new NPs have been hired into the Vanderbilt APP group. These expenses totaled $862,857 per year in onboarding costs. If retention improved by 50%, the return on investment (ROI) would total $491,025. Recognizing the challenge to recruit and retain NNPs, organizations should explore creative solutions to develop and support formalized mentoring programs. Further research is warranted to validate use of the NANNP toolkit in the establishment and evaluation of a formalized mentoring program.

Project Methods or Process

Detail using the following sub-headings (where applicable): study design (e.g. quality improvement, teaching innovation, observational, experimental), participants/subjects, sample size, inclusion/exclusion criteria, variables or outcomes, along with instruments/methods/tools that will be used to measure these variables.

Design: This exploratory study utilizes a non-experimental mixed-method design. Quantitative data include frequency and length of mentoring meetings, activities completed, and ratings of meaningfulness on a Likert-type scale. Qualitative data include personal and professional goals and mentoring needs.

Participants: In 2020, eight NICU NPs and two physician assistants (PAs) will participate in the mentoring program from a convenience sample of Vanderbilt NICU APPs.

Inclusion/Exclusion criteria: The mentoring program is open to all Vanderbilt NICU NPs, and NPs with more than three years of experience volunteer as mentors for the program. It is a job expectation that all new hires with less than one year of experience participate as mentees.

Variable/outcomes: Determine the impact of the mentoring program on job satisfaction and intent-to-stay. Job satisfaction is measured utilizing the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS). Items are measured on a 6-point Likert scale, and higher scores indicate higher levels of satisfaction. A composite score is calculated from the 44 items that
comprised the six subscales. Intent-to-stay is measured on the same 6-point Likert scale as the MNPJSS.

Instruments/tools/methods used to measure variable: An electronic survey includes the MNPJSS to measure job satisfaction and two intent-to-stay items. I will follow up with all mentoring participants monthly to identify resources and address any concerns. I created a REDCap survey to collect quantitative and qualitative data about meetings and meaningfulness of the 11 NANNP toolkit activities. After completion of the mentoring program, all Vanderbilt NICU NPs will complete the same electronic survey to examine job satisfaction and intent-to-stay.

Mentoring Program Training: Mentoring program participants attended a three-hour retreat in January 2020 so that roles and expectations of the mentor/mentee relationship were clear. During the retreat, I provided a standardized training of all NANNP PowerPoint materials for our team's participants. At the conclusion of the retreat, mentoring pairs developed mutual goals to guide evaluation of the effectiveness of the relationship.

**Timetable of planned activities for achievement of aims**

_The request may be for no more than two years._
Include specifics about timing of project onset, data collection etc. as well as dissemination plan (eg., manuscript submission, presentations at professional meetings).

The new mentoring cohort begins in January 2020. I will collect data monthly via REDCap surveys and meet with participants 1-2 times a month to provide resources and address any problem. Participants commit to the relationship for a minimum of six months, but the recommendation is for the program to last up to one year. Last year, I received a grant from the Florida Association of Neonatal Nurse Practitioners to support the mentors’ continued efforts in the mentoring role. Each mentor will receive a gift card at the conclusion of the program, per the FANNP instructions, for their efforts and commitment to mentoring the next generation of NNPs.

I am revising my manuscript from my original DNP project for submission, and I will create a separate manuscript for data collected from this project. I have pending abstracts with Duke University, the Academy of Neonatal Nurses, and the National Association of Neonatal Nurse Practitioners. I committed to present in October 2020 at the Florida Association of Neonatal Nurse Practitioners Symposium because I received a grant from the organization.

_Anticipated deliverables:_  
- ✔️ Publication(s)  
- ✔️ Presentation(s)  
- Other

_Target journal(s):_  
- Journal of the American Association of Nurse Practitioners, Advances in Neonatal Care* (first right of refusal for manuscript)

_Target conference(s):_  
- National Association of Neonatal Nurse Practitioners, Florida Association of Neonatal Nurse Practitioners, American Association of Nurse Practitioners, Academy of Neonatal Nursing

_Please acknowledge support as follows:_

Vanderbilt University School of Nursing Faculty Scholarship Program
Budget including salary and non-salary requests.
The program recognizes that faculty investment time, project personnel (administrative assistants, statistician), equipment, and other funds might be needed.
Applicants are encouraged to consider resource needs comprehensively when preparing the budget.

| APPLICANT Requested Percent Effort: | 20 % |

**OTHER PERSONNEL**

*One per line, list each person like this: Name, Title, % Time (Justification): $ Total Project Cost*

Statistician support, supported by the faculty scholarship program
Consultation from the qualitative research core $2500
Jennifer Doersam - REDCap support
Food/snacks for mentoring focus group meetings to collect qualitative data = $100/quarter

**OTHER PERSONNEL Subtotal in USD ($):** 2700

**EQUIPMENT – Itemize**

*One per line, list like this: Equipment description (Justification): $ Total Project Cost*

N/A

**EQUIPMENT Subtotal in USD ($):** 0

**CONSUMABLE SUPPLIES - Itemize**

*One per line, list like this: Supply description (Justification): $ Total Project Cost*

Binders for mentoring participants, containing copies of mentoring toolkit activities. Copies of articles/resources that are unique to each dyad to enhance mentoring relationships.
Certificates for recognition ceremony at completion of mentoring program

**CONSUMABLE SUPPLIES Subtotal in USD ($):** 120

**OTHER EXPENSES - Itemize**

*One per line, list like this: Expense description (Justification): $ Total Project Cost*

N/A

**OTHER EXPENSES Subtotal in USD ($):** 0

**GRAND TOTAL in USD ($):** 2820

Budget comments (including notation of any subtotal or grand total revisions, if applicable) (optional):
**Biosketch:**

Colleen Reilly Moss is a neonatal nurse practitioner (NNP) at Vanderbilt Children's Hospital. She has worked as an NNP since 2003, beginning her career at Children's Hospital Colorado before returning to Vanderbilt in 2007. She provides neonatal care at the Level IV NICU at Vanderbilt as well as a Level II NICU in Columbia, TN. Colleen joined the Vanderbilt University School of Nursing faculty as an instructor in August 2019, and she teaches in both the neonatal specialty program and the Doctor of Nursing Practice program.

Colleen completed her DNP program at the University of Tennessee at Chattanooga in December 2019. Her interests are in teaching, professional development, and mentoring. Her DNP translational project focused on the positive impact of mentoring on job satisfaction and retention for novice and experienced neonatal nurse practitioners.

Colleen is a member of the Academy of Neonatal Nurses, National Association of Neonatal Nurse Practitioners, Florida Association of Neonatal Nurse Practitioners, American Association of Nurse Practitioners, American Nurses Association, and Tennessee Nurses Association. She is an instructor mentor for the American Academy of Pediatrics' Neonatal Resuscitation Program. She earned a BS in Child Development in 2000 from Vanderbilt University, and her MSN with a specialty in neonatal care from VUSN in 2001.

**Primary potential mentor:** Betsy Kennedy

**Mentor Email address:**

**List any other potential mentors:** Karen Hande

**Identification of key clinical personnel whose cooperation for a clinical project is essential:**

Michelle Terrell, director of VCH APPs, and Wendy Araya, manager of neonatal APP team at Vanderbilt Children's Hospital. The new educator for the Neonatal APP team (the group is currently interviewing candidates). Currently, it is an expectation that new hires participate as mentees in the program. Vanderbilt NNPs with at least three years of experience volunteer as mentors for the project.

**I am the applicant and I agree to the 12-month commitment to remain at VUSN post-completion:**

- **Yes**
- **No**