

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Vicki A. Freedenberg, PhD, RN

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Electrophysiology Nurse Scientist

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University Of Maryland Baltimore	BSN	06/1980	Nursing
University of Maryland Baltimore	MSN	01/1983	Nursing
University of Maryland Baltimore	PhD	05/2013	Nursing

NOTE: The Biographical Sketch may not exceed five pages. Follow the formats and instructions below.

A. Personal Statement

My role in the proposed project is Principal Investigator. As an Advanced Practice Nurse in Electrophysiology for 25 years, I have had extensive clinical and research experience with adolescents with cardiac arrhythmias and devices for 25 years and am committed to advancing the health and knowledge of this population. I have seen the psychosocial issues that surface in the teen years which are magnified by the unique stressors associated with congenital heart disease and living with a cardiac device. My dissertation study was a feasibility study using a Mindfulness Based Stress Reduction (MBSR) intervention in this patient group, with the result of significant reductions in anxiety. The MBSR intervention incorporates group support in addition to mindfulness techniques. This study was published in *Pediatric Cardiology* (2015) 36:786-795. Subsequently, I designed and implemented a randomized two-group study, comparing the MBSR intervention to an online video support group. This study showed significant decreases in illness-related stress in both groups, with qualitative data further elucidating the benefits of the MBSR intervention to decrease cardiac symptoms and increase coping. This study was published in *Pediatric Cardiology* (2017) 38:1415-1425. Being the Principal Investigator for these two studies has equipped me to continue in that role for the proposed study. My experience in designing and delivering the MBSR intervention as well as delivering the online video support group intervention is an asset to the current proposed study.

I have extensive experience running support groups in the adolescent population and adapting interventions to the adolescent population.

B. Positions and Honors

Positions and Employment

April 1992 to Present: Electrophysiology Nurse Scientist, Children's National Medical Center, Washington, D.C (left from January 2006-April 2007 to work at the National Institutes of Health)

July 2015-present: Assistant Professor of Pediatrics, George Washington University School of Medicine

August 2006-April 2007 : National Institute of Dental and Craniofacial Research, National Institutes of Health. Position: Research Nurse Specialist

January 2006 to August 2006: National Heart Lung and Blood Institute, National Institutes of Health, Bethesda, Maryland. Position: Clinical Trials Specialist

March 1986 -1990: Washington Hospital Center, Washington, D.C. Position: Clinical Nurse Specialist

August 1987 – April 1992: Life Care Health Associates, Ellicott City, Maryland. Position: Therapist

July 1984-September 1985: Prince George's General Hospital and Medical Center, Cheverly, Maryland. Position: Nursing Education Specialist

January 1983-March 1984: Peninsula General Hospital and Medical Center, Salisbury, Maryland. Position: Staff Development Instructor

January 1983-March 1984: Salisbury State College, Salisbury, Maryland. Position: Instructor, Department of Nursing

December 1981-January 1983: Doctor's Hospital, Lanham, Maryland. Position: Staff Nurse

September 1981-December 1981: Manpower Health Care Agency, Baltimore, Maryland. Position: Staff Nurse

June 1980-September 1981: Johns Hopkins Hospital, Baltimore, Maryland. Position: Staff Nurse

Other Positions and Professional Memberships

2016-present Vice President for Associated Professionals, Pediatric and Congenital Electrophysiology Society (PACES) (3 year term)

2015-present Member, SADS Foundation Medical Education Committee

2003-present Heart Rhythm Society

2012-present Pediatric and Congenital Electrophysiology Society (PACES)

2013-present American Heart Association

Honors

2014-present Conway Nursing Research Scholar, Children's National Health System

2016 Patrick Joyce Research Award, Pediatric and Congenital Electrophysiology Society

2004 Outstanding Recognition in Nursing Education Award, Children's National Medical Center

2003 Leadership in Clinical Practice Award, Children's National Medical Center

1980 Who's Who Among American Colleges and Universities

1980 Sigma Theta Tau-National Honor Society of Nursing

C. Contribution to Science

My most significant contributions to science to date are two studies I have completed which have led to the design of the proposed study. The first study was the pilot study I designed and implemented using a Mindfulness Based Stress Reduction intervention which I adapted for a group of adolescents with cardiac pacemakers or defibrillators. There was a significant reduction in anxiety, and significant correlations found between coping skills and anxiety/depression. This published study was the first to utilize a psycho-educational intervention in this patient population. The second study was a randomized two group study of adolescents with cardiac diagnoses comparing an MBSR intervention group to a live videoconference support group. Both groups showed a decrease in illness-related stress and improvement in coping skills. Adolescents with cardiac disorders and/or cardiac devices face unique challenges such as the experience of getting shocked, school absence, physical limitations and restrictions, social isolation, peer issues, and body image changes. The adolescent's response to these issues is determined by risk factors including coping style, developmental level, temperament and family functioning. In addition, many common medications used to treat mental health problems such as anxiety and depression can increase the risk of arrhythmias which could lead to ICD shocks. Therefore, psycho-educational and mind-body interventions may be an important addition to the care of this patient population and other groups of at-risk adolescents with chronic illnesses.

Freedenberg, V.A., Thomas, S.A., Friedmann, E. A pilot study of a mindfulness based stress reduction program in adolescents with implantable cardioverter defibrillators or pacemakers. *Pediatric Cardiology* 2015; 36(4): 786-95.

Freedenberg, V.A., Hinds, P.S., Friedmann, E. Mindfulness based stress reduction and group support decrease stress in adolescents with cardiac diagnoses: A randomized two-group study., *Pediatric Cardiology* 2017; 38(7): 1415-1425.

Freedenberg, V.A., 2013. Feasibility and effect of a mindfulness based stress reduction program on anxiety, depression, and coping in a sample of adolescents with implantable cardioverter defibrillators or pacemakers (Doctoral dissertation, University of Maryland, Baltimore).

D. Research Support

Funded Research:

Completed 4/2016:, "Effect of a Mindfulness Based Stress Reduction Program on Anxiety, Depression, and Coping in Adolescents or Young Adults with Cardiac Diagnoses: A Randomized Two-Group Trial"

Funded through the Conway Nursing Research Endowed Chair Fund, Children's National
Overall goal: compare MBSR intervention group to online video support group, measuring clinical outcomes of anxiety, depression, coping skills

Responsibility: PI

Completed 4/2013: "Feasibility and Effect of a Mindfulness Based Stress Reduction Program on Anxiety, Depression, and Coping in a Sample of Adolescents with Implantable Cardioverter Defibrillators or Pacemakers"

Funded through University of Maryland School of Nursing

Overall goal: feasibility of MBSR intervention in this patient population and outcomes of anxiety, depression and coping

Responsibility: PI

