BIOGRAPHICAL SKETCH Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. DO NOT EXCEED FOUR PAGES. NAME POSITION TITLE Perkhounkova, Yelena Statistician/Biostatistician Manager eRA COMMONS USER NAME (credential, e.g., agency login) EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.) DEGREE INSTITUTION AND LOCATION YEAR(s) FIELD OF STUDY (if applicable) Moscow Aviation Institute, Moscow, Russia BS & MS 1988 **Applied Mathematics Educational Measurement and** The University of Iowa, Iowa City, IA MA 1994 **Statistics Educational Measurement and** The University of Iowa, Iowa City, IA PhD 2001

Statistics

A. PERSONAL STATEMENT

As the Statistician Manager for The University of Iowa College of Nursing, I provide dedicated support for the research efforts of collegiate faculty. My office is located within the College of Nursing, and I supervise a Data Manager who assists faculty in developing and managing databases and graduate nursing students who assist with data cleaning and basic analyses. In addition, I partner with College of Nursing grants management staff in developing grant proposals. I have performed statistical analyses for a variety of experimental and observational studies, including developing models for longitudinal data with complex hierarchical structures. This experience is key to the success of this project due to the inclusion of repeated measures and data collection occurring at two sites. In particular, my expertise in developing linear mixed models will be critical in demonstrating the effects of the FamTechCare intervention, designed to reduce disruptive behaviors and stress in PWD and to improve caregivers' burden, stress, sleep, and other health outcomes. Thus, I am well-qualified and ideally positioned to provide strong statistical support for the proposed research project.

B. POSITIONS AND HONORS

Positions	
1985-1988	Research Assistant, Dept of Applied Mathematics, Moscow Aviation Institute, Moscow,
	Russia
1990-1991	Engineer-Mathematician, Institute of Computer Science, Academy of Science of USSR
1993-1998	Graduate Research Assistant, Iowa Testing Programs, The University of Iowa, Iowa City, IA
1998-2002	Research Assistant, Iowa Testing Programs, The University of Iowa, Iowa City, IA
2002-2009	Research Associate, Statistical Research Department, ACT, Inc., Iowa City, IA
2009-2011	Associate Research Scientist, College of Nursing, The University of Iowa, Iowa City, IA
2011-	Statistician/Biostatistician Manager, College of Nursing, The University of Iowa, Iowa City, IA
Other Experience and Professional Memberships	
2005-2009	Statistical consultant, Wendy's High School Heisman Recognition Program
2006-2007	Statistical consultant, Council of the Great City Schools
2007-2008	Statistical consultant, Education Trust
2009-2009	Statistical consultant, KFC Colonel's Scholars scholarship
2010-	American Statistical Association

<u>Honors</u>

1995-1997	Blommers-Hieronymus-Feldt Fellowship, College of Education, The University of Iowa
2005	Short-Term Grant to review end-of-secondary school examination systems in Russia,
	International Research and Eychanges Roard (IREX)

C. SELECTED PEER-REVIEWED PUBLICATIONS (in chronological order)

- 1. **Perkhounkova,Y.,** Noble, J., & Sawyer, R. (2005). *Modeling the effectiveness of developmental instruction.* (ACT Research Report Series 2005-2). Iowa City, IA: ACT, Inc.
- 2. **Perkhounkova,Y.,** Noble, J., & Sawyer, R. (2006). A Method of Modeling the Effectiveness of Developmental Instruction. *Research in Developmental Education*, 20(2), 1-5.
- 3. **Perkhounkova,Y.,** Noble, J., & McLaughlin, G. W. (2006). Factors related to persistence of freshmen, freshman transfers, and nonfreshman transfer students. *AIR Professional File*, *99*, 1-9.
- 4. Butcher, H. K., Bursch, H. C., & **Perkhounkova**, Y. (2010). The Effect of Written Emotional Expression on Reducing Stress in Cancer Family Caregivers. *Gerontologist*, *50*: 71-71.
- 5. Ramey, S., **Perkhounkova, Y.**, Downing, N., Culp, K. (2011). Relationship of Cardiovascular Disease, Stress and Vital Exhaustion in an Urban, Midwestern Police Department. *American Association of Occupational Health Nurses Journal*, *59*(5). 221-227.
- 6. Ramey, S., Downing, N., Franke, W., **Perkhounkova, Y.**, & Alasagheirin, M. (2012). Relationships among stress measures, risk factors and inflammatory markers in law enforcement officers. *Biological Research for Nursing, 14(1),* 16-26.
- 7. Daack-Hirsch, S., Driessnack, M., **Perkhounkova, Y.**, Ramirez, A., & Furukawa, R. (2012). A practical first step to integrating genetics into curriculum. *Journal of Nursing Education*, 51(5), 1-5.
- 8. Ramey, S., **Perkhounkova, Y.**, Moon, M., Budde, L., Tseng, H., Clark, K. M. (2012). The Effect of Work Shift and Sleep Duration on Various Aspects of Police Officers' Health. *Workplace Health & Safety, 60(5), 215-222*.
- 9. Steelman, V. M., Graling, P. R, & **Perkhounkova**, **Y.** (2012 in press). Priority Patient Safety Issues Identified by Perioperative Nurses. *Association of periOperative Registered Nurses Journal*.
- 10. Wallace, A., **Perkhounkova, Y.**, Tseng, H., & Schillinger, D. (2013, in press). Influence of Patient Characteristics on Assessment of Diabetes Self-Management Support. *Nursing Research*.

D. RESEARCH SUPPORT

Ongoing Research Support

R01 NR011455-01A1 Williams (PI)

9/2010 - 6/2014

NINR/NIH

Changing Talk to Reduce Resistiveness to Dementia Care

This clinical trial tests the effects a communication training intervention for nursing home staff, verified reduce elderspeak communication, on common and problematic resistiveness to care behaviors of nursing home residents with dementia. This study targets National Institute of Nursing Research (NINR) and National Institute on Aging (NIA) goals for initiatives to manage behavioral symptoms of dementia, train staff in caregiving skills, and provide optimal Long Term Care environments to improve quality of life for residents. The long-term goal is to identify evidence based nursing interventions to overcome costly problem behaviors to improve dementia care.

Role: Statistician

1 R21 NR013541-01 Rose (PI)

4/2012-3/2014

NIH

Correlates among nocturnal agitation, sleep, and urinary incontinence in dementia

The goal of this study is to examine the feasibility and acceptability of the use of body sensors in community-dwelling persons with AD and in their family caregivers and to describe patterns of nocturnal agitation, sleep continuity and duration, and nighttime urinary incontinence, and examine the relationships among them, in community-dwelling persons with AD.

Role: Statistician

Grant # - None Clark (PI)

1/2013 - 12/2013

Hartford Center for Geriatric Nursing Excellence

Body Composition Intervention for Older Women: Reframing weight management.

Weight loss in seniors includes both muscle and fat loss. This, when coupled with age-related decline in muscle mass complicates obesity management, potentially contributing to functional limitations and frailty. The primary goal of this project is to evaluate, through RTC, the effects of a body composition assessment

and behavior change intervention. The intent is to determine whether reframing the context of weight loss from scale weight to body composition change will influence protein intake, physical activity, fat and muscle mass

Role: Statistician

Grant # - None Culp (PI) 6/2012 – 5/2013

University of Iowa Institute for Clinical and Translational Science

Heat-Stress in Hispanic Farm Workers

The purpose of this study is to pilot test heat-stress surveillance protocols in an agricultural work environment and to evaluate a multi-component intervention to reduce physiological strain index heat events in Hispanic male farm workers.

Role: Statistician

Grant # - None Ramey (PI) 2/2012 – 2/2013

Healthier Workforce Center for Excellence

Evaluating stress resilience: a worksite intervention to reduce stress and CVD risk factors in police The purpose of this study is to evaluate the feasibility and effectiveness of a stress-resilience intervention for modifying psychological stress and autonomic response to stress in police officers. Role: Statistician

Grant # - None Wallace (PI) 9/2010 – 8/2013

Robert Wood Johnson Foundation

Implementation of Diabetes Self-Management Support in Community Primary Care

The purpose of this study is to 1) apply a recently developed implementation strategy, which includes an introduction to the intervention and online training modules and support materials, for expanding a successful diabetes self-management support intervention, The Living with Diabetes Clinical Support Program (LWDP), into community (vs academic) primary care settings; and 2) evaluate its effect on clinical processes and patient outcomes.

Role: Statistician

Grant # - None Clark (PI) 6/2011 – 6/2012

University of Iowa Institute for Clinical and Translational Science

Body Composition and Health in Sudanese Families

The purpose of this study is to obtain information on body composition and metabolic risk factors for diabetes and heart disease in Sudanese families, and determine how body composition and metabolic risk factors are affected by family inheritance and by environmental factors found in the Sudan and in the United States. **Ongoing data analysis is being funded internally.**

Role: Statistician

R01 NR009844 Rakel (PI) 8/2007 – 5/2012 NCE

NINR/NIH

Effectiveness of TENS on Hyperalgesia, Pain with Movement, and Function after Total Knee Replacement

The major goal of this study is to test the effectiveness of intermittent, intense TENS on hyperalgesia, pain with movement, and function in subjects post Total Knee Replacement. **Ongoing data analysis is being funded internally.**

Role: Conducting secondary analyses

Completed Research Support

Grant # - None Lu (PI) 6/2011 – 6/2012

Morris Gerontology Research Fund

Slowing Progression in Early Stage AD with Alternative Therapies

The purpose of this pilot study is to identify the effect of combining two alternative modalities Healing Touch and Body Talk Cortices on the progression of AD and behavioral and psychological symptoms of dementia.

Role: Statistician

Grant # - None Specht (PI) 9/2010 - 8/2011

American Nurses Foundation

Continence Promotion in Assisted Living

The purpose of the research is to evaluate ways to promote bladder control (continence) among persons living in Assisted Living facilities.

Role: Statistician

Grant # - None Driessnack (PI) 6/2011 – 5/2012

Sigma Theta Tau

Exploring the feasibility of using the Newest Vital Sign as a measure of health literacy in children

The purpose of this study is to to explore the feasibility of using an existing measure of health literacy, the Newest Vital Sign (NVS) with children.

Role: Statistician

Grant # - None Ramey (PI) 6/2010 – 6/2011

University of Iowa Institute for Clinical and Translational Science

Physical Activity in Law Enforcement

The goal of this study is to examine the nature of physical activity for law enforcements officers within the workplace and on their off days. Since physical activity may confound some variables in studies of these officers, it is important to understand if the profession is primarily sedentary and if so to examine this beyond self-report through the use of activity monitors.

Role: Statistician

Grant # - None Lu (PI) 1/2011 – 12/2011

Hartford Foundation

Healing Touch for Managing OA-Related Pain, Joint Function and Depression

The purpose of this pilot study is to identify the effect of the alternative modality Healing Touch on Osteoarthritis-related symptoms.

Role: Statistician

5 R03 NR10582-2 Burgener (PI) 4/2008 – 3/2010

NIH NINR

Examining Perceived Stigma in Persons with Dementia

The goal of this study was to examine the: 1) 'natural history' of perceived stigma in persons in the early stages of AD and related disorders; 2) relationships among background variables; and 3) effects of the primary caregiver's perceived stigma on QoL outcomes in PwAD.

Role: Conducting secondary analyses

Grant # - None Taylor (PI) 6/2009 – 5/2010

Institute for Clinical and Translational Science, The University of Iowa Group Intervention for Abused Women

The specific aim of this longitudinal pilot study is to describe, in intimate partner violence (IPV) survivors, changes in their reported symptoms associated with IPV (e.g., depressive symptoms, anxiety, thought intrusion, self-esteem, and social isolation) and changes in regulation of the HPA axis Outcomes were evaluated before and after participation in a multi-modal community-based intervention called Music and Account-Making for Behavioral-Related Adaptation (MAMBRA).

Role: Statistician