

## **POSITION DESCRIPTION**

**For the period of July 1, 2017 – June 30, 2018**

**NAME:**

**RANK:** Research Assistant Professor

**DEPARTMENT:** Office of Population Science and Policy

**TITLE:** Cancer Health Outcomes Researcher

The Office of Population Science and Policy (OPSP) at Southern Illinois University School of Medicine (SIU SOM) is broadly defined as a research and policy organization dedicated to improving the health outcomes of the residents of central and southern Illinois. The Office will seek to understand the region SIU SOM serves, design and study optimal approaches to the prevention and treatment of disease, model and disseminate these interventions, and educate future health care providers on the importance of population health to the patients they serve.

The Office intends to focus on four major themes: 1) data acquisition and analysis to identify disease risk, 2) clinical and community focused population health strategies that reduce health disparities, 3) systems based policy formation that provides sustainable solutions, and 4) the population health education of current and future health care professionals.

The Office will use its research, scholarship, and innovation to design, implement, study, and model solutions to our region's health challenges. Our research will guide policy, and our distinguished faculty will advise hospital and clinical systems, government, educators, and industry on the best means to improve population health. The Office will seek and promote collaborations with various sectors of society to bridge knowledge gaps, share methodological expertise, and stimulate translational science.

### **POSITION PURPOSE:**

This is a research position dedicated to providing cancer epidemiologist insight and innovation to advance the mission and goals of the Office of Population Science and Policy, and the Simmons Cancer Institute (SCI) at SIU. The candidate will be expected to develop and pursue a vigorous portfolio of externally funded research complementary to high priority areas of OPSP and SCI rural cancer disparities. The successful candidate will demonstrate expertise in database creation and maintenance, computer and statistical programming, study design and advanced statistical methodologies for existing and emerging population science cancer research. The position requires expertise in behavioral and population-based research studies with the goal of changing cancer health outcomes in central and southern Illinois.

## **FUNCTIONAL RELATIONSHIPS:**

The Research Assistant Professor will report directly to the Science Director of the Office of Population Science and Policy, who reports to the Executive Director of the Office of Population Science and Policy. The position also entails a cross-appointment with the SCI and expected collaboration with the SCI Executive Director and researchers.

## **DUTIES AND RESPONSIBILITIES:**

### **II. Research**

**80%**

1. Develops, pursues and maintains a portfolio of externally funded cancer research complementary to the priority areas of the OPSP and SCI. Writes reports and assists in writing manuscripts for peer-reviewed professional journals. Delivers presentations to the Office and at various national and international scientific and military conferences.
2. Provides epidemiologic support for study design, implementation, and analyses of cancer based investigations, studies, or screening programs that assists with epidemiological and research directions for the OPSP and SCI.
3. Develops protocols and proposals for study methodology and data analyses. Additionally, writes the interpretation of data findings in the context of ongoing research objectives.
4. Performs and helps interpret statistical analyses using SAS or SPSS including logistic regression, general linear models with repeated measures, survival analyses, and other statistical techniques for longitudinal and missing data.
5. Manages numerous research projects simultaneously. Collaborates with other members of OPSP, SCI and SOM to conduct scientific research projects.
6. Merges numerous, large data files to compile comprehensive datasets for studies according to study methodology.
7. Provides knowledge and insight for new study ideas and long-term goals and objectives relevant to OPSP and SCI initiatives.
8. Reviews and remains current with technical and scientific literature in epidemiology and study outcomes of interest.
9. Validates the relevance of data and information sources within and outside the public health system.

### **III. Teaching**

**10%**

1. Mentors and instructs other personnel (i.e., faculty researchers, technicians, residents, medical students, nurses, data entry personnel, statisticians, etc.) in public and population health and/or research methods as needed.
2. Assists in medical and graduate student education by providing lectures in area of expertise as appropriate.

3. Provides didactics in epidemiological research development for SOM Departments, as appropriate.

**V. Service**

**10%**

1. Membership on departmental, medical school, and university committees as appropriate.
2. Demonstrates, by actions, commitment to the mission and the behavioral standards of SIU School of Medicine. Provides excellent service to both internal and external customers through collaboration and partnership; compassion and respect; integrity and accountability; diversity and inclusion; as well as continuous learning and improvement.
3. Participates in affairs of relevant professional societies that foster national and international recognition for OPSP, SCI, and SOM.

**MINIMUM QUALIFICATIONS:**

- Ph.D. and/or post-doctoral training in epidemiology, or health services research. Demonstrated emphasis and expertise in cancer epidemiology research or closely complementary field.
- Sensitive to the needs of underrepresented minority populations.
- Evidence of research capabilities demonstrated by publications in peer-reviewed specialty journals.
- Excellent verbal and written communication skills.

**DESIRABLE QUALIFICATIONS:**

- Demonstrable experience in state of the art approaches to data acquisition and analysis of longitudinal clinical datasets as well as large public use epidemiological datasets.
- Record of methodological and statistical contributions to peer-reviewed articles.
- Demonstrated competence with SAS or SPSS and at least one other statistical software (e.g., STATA, R).
- Certification in SAS base programming will be a plus.
- Proficient in multiple methods of data imputation, cumulative and Cox hazards modeling, structural equation modeling, linear mixed models, generalized estimating equations, the development and validation of prediction models, and non-parametric methodologies.
- Experience with state of the art methods for analyzing clinical trials is highly desirable.
- A proven track record of working effectively on teams inclusive of diverse individuals with varying research experience and backgrounds.

**WORKING CONDITIONS/PHYSICAL DEMANDS:**

See attached Physical and Environmental Requirements form.

**ENVIRONMENTAL, HEALTH AND SAFETY RESPONSIBILITIES:**

Participate in meetings, training and other environmental, health and safety activities as required by SIU School of Medicine.

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Research Assistant Professor Date

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Wiley Jenkins, PhD, MPH Date  
Associate Professor, Family Community Medicine  
Science Director, Office of Population Science and Policy

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Sameer Vohra, MD, JD, MA, FAAP Date  
Executive Director, Office of Population Science and Policy  
Assistant Professor of Pediatrics and Medical Humanities

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Aziz Khan, MD Date  
Professor, Department of Internal Medicine  
Executive Director of Simmons Cancer Institute at SIU

# PHYSICAL AND ENVIRONMENTAL REQUIREMENTS

SIU SCHOOL OF MEDICINE

Incumbent: \_\_\_\_\_ Classification: Research Assistant Professor

Position No. (If applicable): \_\_\_\_\_ Department: Office of Population Science and Policy-SMS

**WORK ENVIRONMENT: (Check all applicable environments)**

<input checked="" type="checkbox"/> Office	<input type="checkbox"/> Hospital
<input type="checkbox"/> Clinic	<input type="checkbox"/> Warehouse
<input type="checkbox"/> Research Laboratory	<input type="checkbox"/> Outdoors
<input type="checkbox"/> Other (Be Specific): _____	

PHYSICAL DEMANDS:	Seldom	Occasionally	Frequently	Constantly	N/A
(Indicate frequency of activity during performance of position duties)	(Performed rarely less than 2% of the time)	(Performed less than 25% of the time)	(Performed 26% to 50% of the time)	(Performed 51% or most of the time)	

*(Click on the Physical Demands Definitions button at the bottom of the form for a list of physical demands definitions)*

Reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Writing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speaking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Close visual acuity	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hearing - Conversation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Hearing - Other Sounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Stooping	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Squatting	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gross hand manipulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fine hand manipulation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working in dust, fumes, gases, or irritants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Working at heights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Working in extreme cold, heat and/or humidity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Working in close quarters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Climbing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operating motor vehicles	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sitting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Standing	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walking	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working above shoulder level	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Twisting	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kneeling	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pushing or pulling	10 - 20 lbs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carrying	10 - 20 lbs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lifting	10 - 20 lbs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please list): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I affirm the environmental and physical demands listed on this form are an accurate reflection of the requirements of this position to the best of my knowledge and belief.

I have read, understand and am capable of meeting the physical and environmental demands of this position.

Supervisor Signature	Date	Wiley Jenkins, PhD	Employee Signature	Date
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