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Biostatistics & Epidemiology  
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## Area of Expertise

My training in theoretical statistics, plus years of collaborations in the areas of public health, medicine, nursing and psychiatry puts me at an extremely advantageous position as a researcher at the interface of interdisciplinary and translational research. I possess an interdisciplinary program of research, facilitated by cross-discipline collaborations with projects as diverse as community-based participatory research involving underserved populations, such as the homeless, marginalized ethnic communities, women's health, and HIV/AIDS, as well as intervention studies in public health. Most of my collaborations include vulnerable populations with chronic and multiple health disparities. This work has significant public health implications, impacting how vulnerable populations are viewed and treated.

My research involves homeless adults and youth, prison parolees and ex-convicts, clients in methadone maintenance, Native Americans, certain at-risk Hispanic and Asian communities.

I have been a PI and co-PI statistician on many federal, state and foundation funded grants. In the area of statistical methods, my research interests include:

1. Survey Sampling (focus: small area estimation), a technique used when subpopulation sample sizes are too small to provide adequate precision for direct estimators;
2. Survey Sampling (focus: randomized response rate) used to elicit a 'truthful' response on sensitive feature(s) from the sampled respondents (of a finite labeled population), so that eventually the population mean of the sensitive feature can be unbiasedly estimated;
3. Experimental Design (focus: Optimal Design), a class of experimental designs that are optimal with respect to some statistical criterion and given a statistical model.

## Qualifications

PhD in Statistics, University of Florida

MS in Statistics, University of Florida

BS in Statistics, University of Calcutta

## Recent Publications

### **Identifying behaviors predicting early morning emotions by observing permanent supportive housing residents: An ecological momentary assessment**

Nandy, R. R., Nandy, K., Hébert, E. T., Businelle, M. S. & Walters, S. T., Feb 2019, In : Journal of Medical Internet Research. 21, 2, e10186.

### **Non-medical strategies to improve pregnancy outcomes of women with gestational diabetes mellitus a literature review**

Al Hashmi, I., Nandy, K. & Seshan, V., Feb 2019, In : Sultan Qaboos University Medical Journal. 19, 1, p. e4-e10

### **Diversity in the era of precision medicine - From bench to bedside implementation**

Mamun, A., Nsiah, N. Y., Srinivasan, M., Chaturvedula, A., Basha, R., Cross, D., Jones, H. P., Nandy, K. & Vishwanatha, J. K., 1 Jan 2019, In : Ethnicity and Disease. 29, 3, p. 517-524 8 p.

### **The effect of a self-efficacy-enhancing intervention on perceived self-efficacy and actual adherence to healthy behaviours among women with gestational diabetes mellitus**

Al-Hashmi, I., Hodge, F., Nandy, K., Thomas, E. & Brecht, M. L., Nov 2018, In : Sultan Qaboos University Medical Journal. 18, 4, p. e513-e519

### **Prevalence of HIV in patients with malignancy and of Malignancy in HIV patients in a tertiary care center from north India**

Sinha, S., Agarwal, A., Gupta, K., Mandal, D., Jain, M., Detels, R., Nandy, K., Devos, M. A., Sharma, S. K., Manoharan, N., Julka, P. K., Rath, G. K., Ambinder, R. F. & Mitsuyasu, R. T., 1 Jan 2018, In : Current HIV Research. 16, 4, p. 315-320 6 p.

### **Self-Report Versus Medical Record for Mammography Screening Among Minority Women**

Nandy, K., Menon, U., Szalacha, L. A., Park, H. J., Lee, J. & Lee, E. E., 1 Dec 2016, In : Western Journal of Nursing Research. 38, 12, p. 1627-1638 12 p.

### **Predictors of pain management among American Indian cancer survivors**

Hodge, F., Nandy, K., Cadogan, M., Itty, T., Warda, U., Martinez, F. & Quan, A., May 2016, In : Journal of Health Care for the Poor and Underserved. 27, 2, p. 636-643 8 p.

### **Erratum to: Korean American Women and Mammogram Uptake (Journal of Immigrant and Minority Health, 10.1007/s10903-015-0164-6)**

Lee, E. E., Nandy, K., Szalacha, L., Park, H. J., Oh, K. M., Lee, J. & Menon, U., 1 Feb 2016, In : Journal of Immigrant and Minority Health. 18, 1, 1 p.

### **Korean American Women and Mammogram Uptake**

Lee, E. E., Nandy, K., Szalacha, L., Park, H. J., Oh, K. M., Lee, J. & Menon, U., 1 Feb 2016, In : Journal of Immigrant and Minority Health. 18, 1, p. 179-186 8 p.

### **Eliciting Information on Sensitive Features: Block Total Response Technique and Related Inference**

Nandy, K., Marcovitz, M. & Sinha, B. K., 1 Jan 2016, *Data Gathering, Analysis and Protection of Privacy Through Randomized Response Techniques: Qualitative and Quantitative Human Traits, 2016*. Chaudhuri, A., Christofides, T. C. & Rao, C. R. (eds.). Elsevier, p. 317-329 13 p. (Handbook of Statistics; vol. 34).

## **Sponsored Projects**

### **Magellan/UNTHSC Strategic Research Initiative**

Stockbridge, E. & Nandy, K.

Magellan Health Inc.

1/01/18 → 31/12/19

### **Texas Center of Minority Health, Education, Research and Outreach - Admin/Development Core**

Vishwanatha, J., Jones, H., He, J., Basha, R. & Nandy, K.

NIMHD: Natl Institute on Minority Health

23/09/17 → 31/05/22

### **Texas Center of Minority Health, Education, Research and Outreach - Admin/Development Core**

Vishwanatha, J., Jones, H., He, J., Basha, R., Nandy, K., Mallet, R., Krishnamoorthy, R. & Simecka, J.

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23/09/17 → 31/05/22

### **Texas Center of Minority Health, Education, Research and Outreach - Admin/Development Core**

Vishwanatha, J., Mallet, R., Krishnamoorthy, R., Jones, H., Fulda, K., He, J., Basha, R. & Nandy, K.

NIMHD: Natl Institute on Minority Health

23/09/17 → 31/05/22

### **Using Multifamily Groups to Improve Family-Centered Self-Management of Type 2 Diabetes among Mexican Americans**

Nandy, K.

University of California - LA

1/08/16 → 30/04/21