NISS National Institute of Statistical Sciences

Ingram Olkin Forum: Statistical Methods for Combatting Human Trafficking

March 15, 2023 ♦ 1 pm - 4 pm ET

NISS Hosted ♦ **Free** Online Webinar

Overview

Human trafficking is a crime, and those who engage in it seek to avoid discovery. Therefore, it is difficult to estimate its prevalence. That difficulty is compounded by the fact that sex trafficking is different from labor trafficking, each operative under a distinct business model. This webinar has expert speakers who will describe statistical approaches for estimating prevalence, especially multiple systems estimation, respondent-driven sampling, and economic modeling. The pros and cons of these methods will be discussed.

This will be a three-hour webinar with one 10-minute break. Each speaker will have 30 minutes, with 30 minutes for a panel discussion. All participants are welcome to join breakout groups with each speaker following the panel, then synthesis and next steps afterwards.

Speakers

DAVID BANKS
Duke University (Forum Chair)

MARGARET HENDERSON
University of North Carolina

NANCY E. HAGAN
North Carolina Human Trafficking Commission

TYLER MCCORMICK
University of Washington

ROWLAND SEYMOUR
University of Birmingham

BERNARD SILVERMAN
Oxford University

Click here to Register on Zoom

AGENDA

All times are in Eastern Time Zone

1:00pm - 1:05pm: NISS / IOF Overview

1:05pm - 1:10pm: Opening Remarks - Forum Chair: **David Banks**, (Duke University)

1:10pm - 1:40pm: "An Overview of Human Trafficking" - **Margaret Henderson**, (University of North Carolina), **Nancy E. Hagan**, (North Carolina Human Trafficking Commission)

1:40pm - 2:10pm: "Respondent-Driven Sampling" - **Tyler McCormick**, (University of Washington)

2:10pm - 2:20pm: 10-minute break

2:20pm - 2:50pm: "Statistical issues in the study of human trafficking and modern slavery" - **Rowland Seymour**, (University of Birmingham) and Bernard Silverman, (Oxford University)

2:50pm - 3:10pm: Speaker Panel Discussion

3:10pm - 3:45pm: Zoom Breakout Group Discussions

- Those interested in volunteering as notetakers in the Zoom breakout rooms can reach out to **Megan Glenn** at mglenn@niss.org

3:45pm - 3:55pm: Synthesis & Future Steps

3:55pm - 4:00pm: Closing Remarks

About the Speakers

Margaret Henderson is a Teaching Associate Professor with the School of Government at the University of North Carolina at Chapel Hill. Her current work primarily includes training professionals engaged in public service, facilitating public meetings and assisting local governments to address human trafficking and elder abuse. In facilitation work, she specializes in the practical implications of managing cross-organizational collaborations.

Nancy Hagan, PhD, is the Senior Human Trafficking Analyst for Project NO REST whose expertise includes coalition building and direct service with LEP Spanish-speaking individuals and community groups, in particular immigrants and farmworkers, around issues of labor and sex trafficking.

Tyler McCormick is an Associate Professor in the Statistics and Sociology Department at University of Washington. His research has been devoted to two themes: how to develop statistical methods to learn about social network structure using sampled or partially observed network data; and how to leverage social structure in social networks to access populations that are excluded from the sampling frame of most surveys (the homeless, or

individuals living with HIV, for example). McCormick's work on statistical methods have focused primarily on "How many X's do you know?" data. He has published papers on estimating respondents' degrees, the population degree distribution, and levels of overdispersion (excess variation in the data due to social structure). McCormick's most recent work in this area is a new class of statistical models based on latent space models proposed in the complete network literature. McCormick has also worked extensively on data collection issues for these data, suggesting strategies for more efficient survey design and proposing statistical adjustments for common forms of respondent error. McCormick's work on hard-to-reach populations proposes network-based estimates for the demographic profiles of these populations. This project also let to survey design recommendations for future data collection. He has published on these topics in the Journal of the American Statistical Association and the American Journal of Sociology.

Rowland Seymour is Assistant Professor of Mathematics in the University of Birmingham. His research interests are in computational statistics and Bayesian nonparametrics. Rowland has developed models for a wide range of applications including human rights abuses and outbreaks of infectious diseases. Before taking up his current role, he was a Senior Research Fellow at the University of Nottingham's Rights Lab, where he led the Prevalence and Computation group.

Sir Bernard Silverman is a statistician whose research has ranged widely across theoretical and practical aspects of statistics. He is recognized as a pioneer of computational statistics, researching the ways that computing power has changed our ability to collect, analyze, understand and utilize data. He has published extensively in this field, covering aspects from the fundamental mathematical properties of new methods to computer packages for their implementation. He has collaborated in many fields in the physical, life and social sciences, and with various areas of industry and government. See Full Bio

Organizing Committee

David Banks, (Duke University)

Daniel Manrique-Vallier, (Indiana University)

Megan Price, (Human Rights Data Analysis Group)

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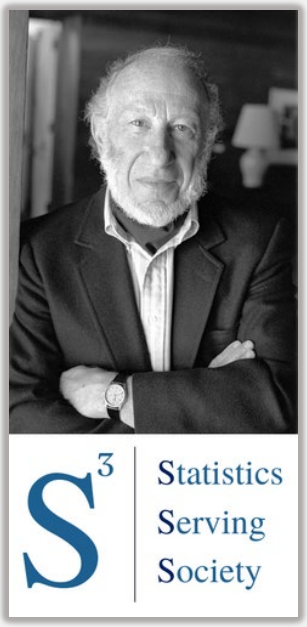

About the Ingram Olkin Forum Series

Ingram Olkin (S3) Forums are a series of forums to honor the memory of Professor Ingram Olkin presented by the NISS Statistics Serving Society (S3).

Each forum focuses on a current societal issue that might benefit from new or renewed attention from the statistical community. The S3 Forums aim to bring the latest innovations in statistical methodology and data science into new research and public policy collaborations, working to accelerate the development of innovative approaches that impact societal problems. As the Forum will be the first time a particular group of experts will be gathered together to consider an issue, new energy and synergy is expected to produce a flurry of new ideas and approaches.

Visit the IOF page for more information:
https://www.niss.org/ingram-olkin-forums

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