



Georgian Implementation Science Fogarty Training (GIFT) Program
Ilia State University & Yale University

Accelerating Impact: Immersive Summer Bootcamp in Implementation Science and Biostatistics

July 10-12, 2024

A G E N D A



JOIN US!



Venue: G106 Conference Hall, 1 Giorgi Tsereteli St, Tbilisi, Georgia

Facilitator: Nino Makhashvili MD, PhD Professor, Faculty of Natural Science and Medicine

09:00-09:30 REGISTRATION Auditorium G 106

09:30-09:40 **WELCOME MESSAGE**

Tushar Singh, MD, PhD, MS, Country Director, Georgia. Regional Workforce Development Advisor, Eastern Europe and Central Asia. U.S. Centers for Disease Control and Prevention (CDC). U.S. Embassy in Tbilisi, Georgia

Ketevan Darakhvelidze MA, Chancellor (Head of Administration) Ilia State University

09:40- 09:45 **OPENING REMARKS**

Denise Esserman, Ph.D. Professor of Biostatistics, Yale School of Public Health

Frederick Altice, MD, MA Professor of Medicine, Yale School of Medicine and Public Health, USA

Irma Kirtadze MD, PhD Assoc. Professor, Faculty of Arts and Science, Ilia State University

09:45-10:35 **KEYNOTE LECTURE**

An overview of implementation Science: What it is and what it is not!

Luke Davis, MD, Assoc. Professor of Epidemiology and Medicine, Yale School of Medicine and Public Health, USA

10 min for QA

10:35-11:25 **PLENARY LECTURE**

Selecting and Combining Implementation Strategies

Frederick L. Altice, MD, MA, Professor of Medicine and Public Health, Yale University, USA

10 min for QA

11:25-11:40 **COFFEE/TEA BREAK**

11:40-12:35 **PLENARY LECTURE**

Study Designs and Methods for Implementation Research

Denise Esserman, Ph.D. Professor of Biostatistics Yale School of Public Health

Q&A

12:35-13:00 **CASE STUDY ON STUDY DESIGN**

Integration of Services within Primary Care Clinics (IMPACT) preliminary results

Eteri Machavariani MD MPH

13:00-14:00 **LUNCH BREAK**

14:00-14:50 **PLENARY LECTURE**

Promoting Addiction Treatment in HIV Clinics Informed by Implementation Science: A series of case studies

E. Jennifer Edelman, MD, MHS Professor of Medicine and Public Health, Yale Schools of Medicine and Public Health

Q&A

- 14:50-15:40 **CONSULTATION**
Real-World Implementation Research: Implementing BPaL-Based Regimens for Drug-Resistant Tuberculosis: Challenges, Lessons Learned, and result
Veriko Mirtskhulava, MD, PhD KNCV, Epidemiologist, Invited lecturer, School of Public Health Ilia State Unievrsity
Discussants: Luke Davis, Jenifer Edelman, Denise Esserman
- 15:40-16:30 **PLENARY LECTURE**
Implementation Science in Clinical Care Settings: Dashboards and Decision Support to Guide Implementation
Mona Sharifi, MD, MPH Assoc Professor, Yale University School of Medicine and School of Public Health
- 16:30-16:45 **COFFEE/TEA BREAK**
- 16:45-17:35 **LIVE STREAM LECTURE**
Using Qualitative and Mixed Methods Research to Strengthen Implementation Science
Ashley Hagaman, PhD, MPH Asst. Professor, Yale School of Public Health
- 17:35-18:25 **PLENARY LECTURE**
Introduction to NIATx: A Bundle of Implementation Science Strategies
Lynn Madden, PhD, MPA
Q&A
- 18:25-19:00 **ASK THE EXPERTS: IMPLEMENTATION RESEARCH CONSULTATION**
Tamar Zurashvili MD, MPH, PhD student
Enhancing HIV Status Disclosure: Evaluating Barriers and Facilitators to Implementing Evidence-Based Intervention among PLHIV
- Denise Esserman, PhD
- E. Jennifer Edelman, MD, MHS
- Mona Sharifi, MD, MPH
- Luke Davis, MD
- Frederick Altice, MD
- Lynn Madden, PhD

Facilitator: David Otiashvili, MD, PhD, Assoc. Professor, Faculty of Natural Science and Medicine

09:00 REGISTRATION Auditorium G 106

09:00- 09:05 **OPENING REMARKS**

David Otiashvili, MD, PhD, Assoc. Professor, faculty of Natural Science and Medicine

09:05-10:00 **KEYNOTE LECTURE**

IMPLEMENTATION RESEARCH FROM BASICS TO ADVANCED:
Terminology, Frameworks, and Theories to Guide the Process
Luke Davis, MD
Q&A

10:00-10:50 **REAL WORLD CASE EXAMPLES: WHAT GETS IN THE WAY?**

Real-World Implementation During Disruptions: Lessons from COVID-19 and War
Frederick L. Altice, MD, MA
Q&A

10:50-11:20 **REAL WORLD IMPLEMENTATION SCIENCE**

Implementation of Syringe Vending Machines in Tbilisi, Georgia
Irma Kirtadze, MD, PhD, Assoc. Professor, Faculty of Arts & Science, Faculty of Medicine and Public Health, Ilia State University

11:20-11:50 **Why Did Our Strategy Not Work As Expected? Evaluating Fidelity and Unintended Consequences)**

Mona Sharifi MD, PhD, Assoc Professor, Yale University School of Medicine and School of Public Health

11:50-12:05 **COFFEE/TEA BREAK**

12:05-13:00 **CDC LECTURE**

Eliminating Hep C
Davit Baliashvili, MD, PhD, MPH, MSc, Senior Public Health Specialist, CDC Georgia country office

13:00-14:00 **LUNCH BREAK**

14:00-15:15 **METHODOLOGICAL AND STATISTICAL CONSIDERATIONS IN IMPLEMENTATION SCIENCE**

Denise Esserman, Ph.D. Professor of Biostatistics, Yale School of Public Health
CASE EXAMPLE

- 15:15-16:05 **PLENARY LECTURE**
Optimizing Coaching (Facilitation) into Implementation Research
Lynn Madden, PhD
- 16:05-16:55 **LIVE STREAM LECTURE**
How might one assess community effectiveness of vaccines? The test-negative case-control study and a case study of COVID-19
Sten Vermund, MD, PhD, Professor of Public Health, Yale School of Medicine and School of Public Health, USA
- 16:55-17:10 **COFFEE/TEA BREAK**
- 17:10-18:00 **LIVE STREAM LECTURE**
Expanding the HIV Care Cascade: Using Implementation Science to Incorporate NCDs and Related Consequences
Sten Vermund, MD, PhD, Professor of Public Health, Yale School of Medicine and School of Public Health, USA
10 min for Q&A
- 18:00-19:00 **CASE EXAMPLE:**
Foreseeable & Unforeseen Challenges in Implementation Science
E. Jennifer Edelman, MD, MHS, Professor of Medicine and Public Health, Yale Schools of Medicine and Public Health
Unplugged - Challenges in Setting up a Study
David Otiashvili MD, PhD. Assoc. Professor, Faculty of Natural Science and Medicine, Ilia State University
- 19:00-19:30 **ASK THE EXPERTS: IMPLEMENTATION RESEARCH CONSULTATION**
Mariam Pashalishvili, MSc, PhD student
Integrated Approaches to Substance Use, Mental Health, and HIV Services in EECA Countries and Georgia
- Denise Esserman, PhD
 - E. Jennifer Edelman, MD, MHS
 - Mona Sharifi, MD, MPH
 - Luke Davis, MD
 - Frederick Altice, MD
 - Lynn Madden, PhD

BIOSTATISTICS TRACK

Facilitator: Denise Esserman, *Ph.D. Professor of Biostatistics, Yale School of Public Health*

TAs: Eteri Machavariani MD, MPH, Irma Kirtadze MD, PhD

The biostat-workshop will be held in Computer Auditorium, accommodating a limited number of participants (max 20). We've outfitted the room with individual workstations, each pre-loaded with R and RStudio, ready for you to dive right in. Sample datasets will also be provided for practical, hands-on learning and application of session concepts.

09:00 REGISTRATION Auditorium G 106

09:00-09:50 INTRODUCTION TO SAMPLE SIZE FOR CLINICAL TRIALS

Denise Esserman, PhD

- Importance of estimating sample size in research.
- What goes into a sample size calculation.
- Common sample size calculation methods (means, proportions, etc.).
- Using R packages for sample size calculation (e.g., pwr package)

10:00-11:00 HANDS-ON PRACTICE

- Participants work on sample size exercises using R software.
- TAs assist in Q&A

11:00-11:15 COFFEE/TEA BREAK G 106

11:15-12:45 INTRODUCTION TO MORE COMPLEX DESIGNS AND HANDS-ON PRACTICE

- Discuss the parameters needed for more complex designs.
- Designs we will consider include cluster randomized, longitudinal, and stepped wedge designs.
- Use R packages for sample size calculations (e.g., CRTsize; swCRTdesing)

12:45-13:45 LUNCH BREAK G 106

13:45-15:15 INTRODUCTION TO MISSING DATA

- Introduction

HANDS-ON PRACTICE

- Exercise on missing data

MISSING DATA MECHANISMS

- Missing data mechanisms (MCAR, MAR, MNAR).
- Identifying missing data patterns.
- Sensible approaches to handle missing data.

HANDS-ON PRACTICE

- Impact on effect estimates in the presence of missing data
- Fit models using R

IMPUTATION METHODS

- Single and multiple imputation

HANDS-ON PRACTICE

- Multiple Imputation in R (e.g., mice).
- Participants analyze datasets with missing data using R.
- Trainer provides feedback and addresses any challenges.

METHODS FOR MNAR (if time permits)

15:15-15:30 COFFEE/TEA BREAK G 106

17:45-18:00 WRAP UP & CLOSING REMARKS Auditorium G 106

Frederic L. Altice, Denise Esserman, Irma Kirtadze

NON-BIOSTATISTICS TRACK

- 09:00 REGISTRATION Auditorium G 106
- 09:00-09:30 **RAPID ASSESSMENT OF BARRIERS AND FACILITATORS ALONG THE SOCIO-ECOLOGICAL MODEL (INCLUDE AN INTRO FOR NGT)**
Lynn Madden, Ph.D, MPA CEO, APT Foundation, Inc. Asst. Professor, Yale University School of Medicine
- 09:30-11:00 **ACTIVITY - Track A** Auditorium G 106
- 09:30-11:00 **ACTIVITY - Track B** Auditorium T 102
- Real-World Experience with NOMINAL GROUP TECHNIC
COME UP WITH A QUESTION AND INVITE PARTICIPANTS**
- Lynn Madden, Ph.D, MPA, CEO,
APT Foundation, Inc. Asst. Professor,
Yale University School of Medicine
- Frederick L. Altice, MD, MA, Professor of
Medicine and Public Health, Yale School of
Medicine and Public Health
- 11:00-11:15 COFFEE/TEA BREAK G 106
- 11:15-12:45 **HOW TO WRITE AN EFFECTIVE
MANUSCRIPT FOR PEER REVIEW**
E. Jennifer Edelman, MD, MHS
- 11:15-12:45 **HOW TO WRITE AN EFFECTIVE GRANT
PROPOSAL**
Frederick L. Altice, MD, MA
- 12:45-13:45 LUNCH BREAK G 106
- 13:45-15:15 **NIATx WORKSHOP**
Unpacking the Implementation Tools from NIATx – a comprehensive implementation strategy.
Lynn Madden, Ph.D, MPA
CEO, APT Foundation,
Inc. Asst. Professor, Yale
University School of
Medicine
- 13:45-14:15 **Implementation facilitation: A bundle of
implementation strategies**
E. Jennifer Edelman, MD, MHS, Professor of
Medicine and Public Health, Yale Schools of
Medicine and Public Health
- 14:15-14:45 **User-Centered Framework for Implementation
of Technology (UFIT): Development of an
Integrated Framework for Designing Clinical
Decision Support Tools Packaged With Tailored
Implementation Strategies.**
Mona Sharifi, MD, MPH, Assoc. Professor, Yale
University School of Medicine and School of
Public Health
- 14:45-15:15 **Project VIDA (Peru Study)**
Frederic L. Altice, MD, MA, Professor of Medicine
and Public Health, Yale School of Medicine, and
Public Health
- 15:15-15:30 COFFEE/TEA BREAK G 106
- 15:30-17:45 **NIATx WORKSHOP**
Continued
- 15:30-16:30 **Economic Evaluation in Implementation
Research: Is Cost a Barrier for LMICs?**
Mona Sharifi, MD, MPH, Assoc. Professor, Yale
University School of Medicine and School of
Public Health
- 16:30-17:45 **How to conduct a Literature Review**
Kate Nyhan, MLS, IPI PMC. Librarian Yale University
School of Medicine and School of Public Health
15 min for Q&A
- 17:45-18:00 **WRAP UP & CLOSING REMARKS** Auditorium G 106
Frederic L. Altice, Denise Esserman, Irma Kirtadze



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