<table>
<thead>
<tr>
<th>Time and Session</th>
<th>Topic</th>
<th>Comments/Notes</th>
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<tbody>
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<td><strong>Session 1: (1:00-1:20)</strong></td>
<td>Introductions of students; introduce dual goals of workshop to provide entre to D&amp;I as well as build cohort of scholars; expectations for participants; disseminating D&amp;I; follow-up and engagement over time; make sure other resources in D&amp;I are introduced</td>
<td>Elvin Geng</td>
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| **Session 2: Why a science of D&I is needed (1:25-1:45) - Elvin Geng** | Describe motivation for implementation science; understand need for rigor as well as relevance for generalizable but impactful implementation research; the challenge of context and generalizability; external validity in implementation science; implications for evidence | Discussant: Elvin Geng  
Moderator: Stephanie Mazzucca |
| **Session 3: Theories, Models, & Frameworks in Dissemination & Implementation Science (1:50-2:10) – Stephanie Mazzucca** | Understand approaches to addressing the gap between evidence and practice; the role of theory; common frameworks and theories; specific frameworks (e.g., CFIR); applications of theory to inform the understanding of a particular implementation problem; link to related theories in health behavior and public health (e.g., Bandura, socio-ecological frameworks) | Discussant: Stephanie Mazzucca  
Moderator Byron Powell |
| **Session 4: The treatment - designing and applying implementation strategies (2:15 to 2:35) - Byron Powell** | Understand implementation strategies; discuss conserved elements of strategies; classification efforts of strategies; examples and applications; importance of conceptualizing and reporting. | Discussant: Byron Powell  
Moderator: Ginger McKay |
| **Small Group Discussion: 2:45 to 3:15** | “My Journey in D&I Research” | Panel: Enyo Ablordeppey, Pat Lyons, Meagan Pilar  
Moderator: Elvin Geng, Byron Powell |
| **Day 2** | | |
| **Session 5: Implementation outcomes (1:00-1:20) – Ginger McKay** | Outline and define common dissemination and implementation outcomes, and help the attendee apply implementation outcomes in their own work. | Discussant: Ginger McKay  
Moderator: Aaloke Mody |
| **Session 6: Study Designs in Implementation Research (1:25-1:45) – Aaloke Mody** | Understand different research designs that can advance D&I research; pragmatic trials, stepped wedge; cover use of “impact evaluation” or econometric approaches such as regression discontinuity and difference-in-difference; the concept of natural experiments; hybrid designs – implementation and effectiveness trials; choice experiments; human | Discussant: Aaloke Mody  
Moderator: TBD |
Session 7: Context, Adaptation and Fidelity (1:50-2:10) – Ana Baumann
Introduce the concept of adaptation of interventions and implementation strategies; understand the value-added of adaptation particularly as it is related to equity delivery of care, introduce process and tracking framework of adaptation; Discussant: Byron Powell
Moderator: Elvin Geng

Discussion 2:15-3:15 (Small groups of 3-4)
Students to describe their work in D&I, including development of a proposal, and solicit feedback from the group; also linking to additional resources
All faculty

Readings for Session 2
Required:

Optional:

Readings for Session 3
Required:

Optional:

Readings for Session 4
Required:

Optional:

Readings for Session 5
Optional:
Prusaczyk B, Swindle T, Curran G. Defining and conceptualizing outcomes for de-implementation: key distinctions from implementation outcomes. Implementation Science Communications. 2020 Dec;1(1):1-0.

Readings for Session 6
Optional:

Readings for Session 7
Required:

Optional:
INSTRUCTOR BIOS

Elvin H. Geng, MD, MPH
Professor of Medicine
Director of the Center for Dissemination and Implementation at the Institute of Public Health
Using the lens of implementation science, Dr. Geng conducts research to optimize the use of evidence-based interventions in the public health response to HIV. His work is carried out through collaborations in Kenya, Zambia, Uganda, as well as in safety-net setting in the US. Current projects make use of a range of observational, mixed methods, quasi-experimental and experimental methods.

Ana A Baumann, Ph.D.
Assistant Professor
Ana Baumann's research agenda focuses on identifying strategies to facilitate the implementation and dissemination of evidence-based interventions in low-resource settings. Baumann is the co-director of the Dissemination and Implementation Research Core (DIRC). Through DIRC, she has supported several investigators as an implementation scientist in receiving federally funded funds to conduct studies aiming to accelerate the use of evidence-based interventions or guidelines in different settings of care.

Byron J. Powell, Ph.D., LCSW
Assistant professor at the Brown School
Byron Powell is an Assistant Professor at the Brown School and School of Medicine at Washington University in St. Louis where he serves as Co-Director of the Center for Mental Health Services Research. He aims to improve the quality of behavioral health services by identifying barriers and facilitators to implementing evidence-based practices; designing, tailoring, and assessing the effectiveness of implementation strategies; and advancing implementation research methods. Byron is President of the Society for Implementation Research Collaboration, and he is on the editorial boards of Implementation Science and Implementation Research and Practice. He is a core faculty member for the Implementation Research Institute (IRI); HIV, Infectious Disease and Global Health Implementation Research Institute (HIGH IRI); Training Institute for Dissemination and Implementation Research in Health (TIDIRH)-Australia; and TIDIRH-Ireland.

Aaloke Mody, MD
Assistant Professor in Medicine
Dr. Mody’s overall interest is in utilizing interdisciplinary implementation science research to understand how public health systems can be optimized to deliver high-quality and patient-centered HIV care in resource-limited settings. He has particular interest in utilizing advanced epidemiologic methods, including natural experiments and other causal methods for real-world data, for implementation research in order to answer the most pressing and relevant questions to improving patient outcomes during real-world implementation of HIV care in resource-limited settings.

Stephanie Mazzucca, Ph.D.
Research Assistant Professor
Stephanie Mazzucca's research works to develop and evaluate evidence-based approaches for promoting healthy eating and physical activity to prevent chronic diseases such as obesity, diabetes and cancer. A member of the Prevention Research Center, Mazzucca's work focuses on improving home environments and organizations - such as public health departments and community-based groups - to support healthy behaviors.
for populations at risk of chronic disease. She also works to improve the dissemination and implementation of research evidence into public health and clinical practice.

**Ginger McKay, Ph.D.**
Research Assistant Professor
Dr. McKay's research focuses on the dissemination and implementation of evidence-based practices addressing infectious disease, especially the sustainability and de-implementation of interventions. She addresses research questions in these areas using mixed-method and simulation approaches.

**Enyo Ablordeppey, MD, MPH, FACEP, FCCM**
Assistant Professor
Dr. Ablordeppey is an associate professor of Emergency Medicine and Anesthesiology critical care at Washington University in St. Louis Missouri. She has board certifications in emergency medicine, critical care medicine, and echocardiography. Dr. Ablordeppey's current research focuses on the gaps in critical care ultrasound applications, specifically procedural and diagnostic ultrasound, on clinical outcomes, clinician perceptions, patient safety, and hospital resource utilization. She uses implementation science approaches to develop and modify implementation and de-implementation strategies in order to optimize health care delivery and avoid medical over utilization in critically ill patients and acute care environments. Her over-arching focus is on understanding the behavioral and systems adaptations required to increase the uptake of evidence into healthcare practices.

**Patrick G. Lyons, MD, MSc**
Instructor in Medicine
Dr. Lyons is an intensivist and healthcare delivery scientist with specific interests in clinical research informatics, risk prediction modeling, communication, and learning health systems. His current research involves (1) creation, evaluation, and implementation of risk prediction models for hospitalized patients with cancer, (2) leveraging health information technology to improve care transitions for high-risk inpatients, and (3) human-centered design of health information technology and inpatient care delivery systems.

**Meagan R. Pilar, PhD, MPH**
Postdoc Research Associate
Meagan's research focuses on improving population health through policy implementation and evaluation. She is a Postdoctoral Research Associate in the Division of Infectious Diseases and works with the Dissemination and Implementation Research Core as well.