

# **LITE Initiatives 2015-2023: Limited Interaction Targeted Epidemiology**

**Gerald B. Sharp, DrPH  
Epidemiologist, Epidemiology Branch  
Basic Sciences Program, Division of AIDS**

**June 26, 2023**



National Institute of  
Allergy and  
Infectious Diseases

# LITE-1: Background

- LITE-1 was presented to NIAID Council on Sept. 21, 2015 and approved
- The gay dating app Grindr launched in 2009
  - 4 million monthly users by 2012 in 192 countries up to 6m by 2016
- At this time there were 47,352 HIV infections/year in the US
- Question was would it be possible to use social media to enroll large cohorts of people at high risk of infection and follow them to HIV incidence outcomes
- Christian Grov had reported running ad for 2 days on Grindr and enrolling 2,175 participants—also mailed HIV test kits to 1300 subjects under follow-up and had them text photos of their test results
- Our proposal was to use a rarely used biphasic NIH mechanism, that provided two years of funding for investigators to develop remote cohorts of people at high risk of HIV in the US, with three additional years of funding if successful at meeting their enrollment and seroconversion targets
- The original LITE RFA has resulted in four LITE RFAs being supported by NIAID with co-funding by NIMH, NICHD, and NIDA and with active involvement of NIH program officers from these NIH institutes

# LITE-1: Background

- Issued July 27, 2016: ***RFA-AI-16-031: Limited Interaction Targeted Epidemiology (LITE) to Advance HIV Prevention (UG3/UH3) No clinical trials allowed***
- Four applications funded:
  - **Christian Grov**, CUNY Graduate school of Public Health and Health Policy. Screened 43,161 in all 50 states and Puerto Rico using Grindr and other dating apps, tested 8,755 for HIV and enrolled 5,001 HIV-negative participants (524 HIV seroconversions over 4 years)
  - **Jeffrey Parsons & Jonathon Rendina**, Hunter College. Screened 113,874 MSM throughout US using Grindr and other dating apps, tested 8,111 for HIV, and enrolled 7,957 HIV-negative participants; HIV incidence rates: Black: 2.5%; multiracial: 1.3%; Latino: 1.2%, white: 0.8% (155 HIV seroconversions over 3 years)
    - **Jonathan Rendina & Ali Talan** received RO1 grant in 2020 to study viral suppression among participants testing HIV positive in Grov & Rendina LITE-1 studies

# LITE-1: Background

- **Andrea Wirtz & Sari Reisner**, Johns Hopkins University & Harvard University, Screened 3,558 trans women using both clinic sites and social media. They enrolled and followed 1,312 participants in Eastern and South-Eastern US using social media other than dating apps (Facebook, Snapchat). HIV incidence rates: Digital cohort: 0.2%; Site-based: 0.9% Black: 1.9%; Latino/Latina: 1.0%; white: 0.2%
- **Audrey French & Sybil Hosek**, Hektoen Institute for Medical Research, Recruited 3,444 cisgender men and transgender individuals using Facebook, Instagram, and Snapchat and well as the gay dating apps and word of mouth.

# D-LITE: Background

- Issued Jan. 8, 2020: ***RFA-AI-19-067: Digital, Limited Interaction Trials and Epidemiology (D-LITE): Targeting HIV Incidence in the United States (U01 Clinical Trial Required)***
- Three applications funded:
  - **Matthew Mimiaga, Lisa Kuhns & Marvin Belzer**, Brown University & UCLA, Study will conduct an RCT to assess the efficacy of the LifeSkills. Mobile intervention among 5,000 young transgender women recruited online.
  - **Michael Newcomb**, Northwestern University, Study will evaluate the impact of the tailored 2GETHER intervention package on HIV incidence in a cohort of 5,000 MSM.
  - **Michele Ybarra**, Center for Innovative Public Health Research, Study will test the *GrowingUpGuy* HIV prevention program in a cohort of 5,000 13-20-year-old young MSM. Main outcome measures will be HIV incidence, self-reported PrEP and PEP use, and number of STIs

# LITE-2: Background

- Issued April 7, 2021: ***RFA-AI-21-018 Limited Interaction Targeted Epidemiology (LITE-2): To Advance HIV Prevention (UG3/UH3 Clinical Trial Optional)***
- Four applications funded:
  - **Jonathon Rendina & Tamara Taggart**, George Washington Univ., Study will enroll 5,500 HIV-negative Black and Latino men age 16+
  - **Sybil Hosek, Audrey French & Lisa Hightower-Weidman**, Hektoen Inst. for Medical Research. Study will enroll 5,000 young MSM ages 13-34 and test a novel intervention to **prevent HIV infection**
  - **Christian Grov & Adam Carrico**, CUNY Graduate School of Public Health & Policy. Study will enroll 5,000 MSM age 16-49, 3,000 of whom report recent meth use and 2,000 who do not and test an intervention to encourage participants to fill a prescription for PrEP.
  - **Rebecca Schnall, Robert Garofalo & Dustin Duncan**, Columbia Univ. Study will enroll 5,000 MSM age 17-25 and test an intervention to prevent HIV infection

# AWARE: Background

- Issued Aug. 12, 2021: ***RFA-AI-21-058 American Women: Assessing Risk Epidemiologically (AWARE) (R01 Clinical Trial Optional)***
- Three applications have been funded:
  - **Latesha Elope & Lynn Matthews.** CAMELLIA Cohort: A longitudinal study to understand sexual health and prevention among women in Alabama
  - **Andrea Wirtz & Sari Reisner.** Enhanced COhort methods for HIV Research and Epidemiology (ENCORE) among transgender women in the United States
  - **Rebecca Schnall, Amy Johnson, Mirjam-Colette Kempf.** Examining Social Ecological and Network Factors to Assess Epidemiological Risk in a Large National Cohort of Cisgender Women

# LITE-VS: Background

- Issued April 22, 2022: ***RFA-AI-22-2024 Limited Interaction Targeted Epidemiology: Viral Suppression (LITE-VS) (UG3/UH3 Clinical Trial Optional)***
- Five applications are being funded:
  - Studies will enroll at least 1,000 predominantly minority men and women in the US with HIV, many of whom are not virally suppressed, and follow them to viral suppression outcome
  - Will compare people who obtain suppression to those who do not to better describe personal and structural factors associated with viral suppression