

NSF 18-059

**Dear Colleague Letter: Disrupting Operations of Illicit Supply Networks** 

March 27, 2018

Dear Colleagues:

Illicit supply networks pose profound threats to the health, prosperity, and security of our Nation. These nimble and technologically sophisticated networks traffic enslaved people, illegal weapons, drugs (including opioids), nuclear material, looted antiquities, exotic animal products, and other contraband. These same networks function to funnel illicit profits back to criminal organizations. Illicit supply networks are unencumbered by national boundaries and fuel transnational criminal organizations, with grave consequences for national and international security.

With this Dear Colleague Letter (DCL), the National Science Foundation (NSF) invites proposals to the Operations Engineering program for EArly-concept Grants for Exploratory Research (EAGER) into operational methods to detect, disrupt and disable illicit supply networks. Supplemental funding requests to relevant existing NSF awards and responsive to this DCL are also invited. Such requests also must be responsive to this DCL.

Projects must focus on fundamental research that advances the scientific understanding of the operations of illicit supply networks and methods for their disruption. In recognition of the high importance of broader impacts in NSF research, proposed work must be framed in the context of one or more distinct illicit trafficking environment(s), and must demonstrate domain knowledge of the chosen setting.

While proposals must be responsive to the Operations Engineering program description, given the gravity, scope and complexity of illicit supply networks, submissions from transdisciplinary teams, including operations researchers, are strongly encouraged. Teams may include researchers from the geography and spatial sciences; law and criminal justice; data and computational science; economics; and/or public health communities. In that vein, the benefits and skillsets of the proposed teams, including how they will collaborate, should be articulated.

Representative topics include (but are not limited to) modeling the operational and spatial dynamics of illicit networks; understanding market incentives and mechanisms of illicit networks, including their social, cultural, criminological and legal aspects; innovations in data science and engineering in online space that have the potential to detect and disrupt illicit operations.

EAGER proposals with budgets up to \$300,000 or supplemental funding requests s to existing awards up to 20% of the original award budget (but not exceeding \$300,000) will be considered. Proposed budgets must be justified by project scope. See the NSF Proposal & Award Policies & Procedures Guide

(PAPPG) for guidelines and expectations for these types of proposals. In particular, EAGER proposals must clearly indicate the reason that the proposed work is appropriate for EAGER support.

Interested PIs must contact one of the program officers listed below before submission of their EAGER proposal:

Georgia-Ann Klutke, ENG/CMMI, gaklutke@nsf.gov, (703) 292-2443

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EAGER proposals and supplemental funding requests for supplemental funding will be reviewed on an ongoing basis, but should be submitted to the Operations Engineering program in the Civil, Mechanical, and Manufacturing Innovation Division of the Engineering Directorate by May 15, 2018, to be considered for FY 2018 funding. Titles for proposals responding to this DCL should be prefixed with "EAGER: ISN:".

Signed, Dawn M. Tilbury Assistant Director, Engineering Directorate