

PASCC

Research in Progress

FY19

SYNTHETIC BIOLOGY AND HIGH-CONSEQUENCE PATHOGEN RESEARCH IN THE RUSSIAN FEDERATION

Performer: Johns Hopkins Center for Health Security

Project Lead: Gigi Kwik Gronvall

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ABSTRACT:

The Johns Hopkins Center for Health Security (“the Center”) proposes to embark on a technical analysis of published life science research from the Russian Federation, with a focus on synthetic biology, gain-of-function research on highly transmissible pathogens, and other high consequence pathogen research. Databases of published research (to include PubMed, Web of Science, etc.) will be used to search, extract, and analyze Russian publications to produce a far-ranging analysis of research of interest pursued by Russian scientists. This effort will increase understanding of the Russian life sciences landscape, their relative emphasis on synthetic biology and high consequence pathogen research, concentration of expertise, and identify other descriptive factors useful in contextualizing biosecurity concerns. To aid in this landscape analysis, the Center proposes a Delphi study, to elicit expert opinions about the state of Russian research efforts in synthetic biology and high consequence pathogen research, the expected trajectory of biosecurity concerns about such research, and to identify areas of potential scientific engagement between US and Russian scientists that may increase understanding and reduce concerns. The findings of this research, which will be of broad interest in the USG and beyond, will help facilitate a better understanding of investments in dual use technologies in foreign countries.

Research in Progress describes ongoing PASCC research. For more information please contact INSS@usafa.edu.