NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

NSF 17-024

Dear Colleague Letter: Enabling US-Brazil Collaboration on Cybersecurity Research

October 28, 2016

Dear Colleague:

The Directorate for Computer & Information Science & Engineering (CISE) at the US National Science Foundation (NSF) and the Research and Development Center on Digital Technologies for Information and Communication (CTIC) of the Brazilian National Research and Educational Network (RNP), with support from the Brazilian Ministry of Science, Technology, Innovations and Communications (MCTIC), are pleased to announce their intention to support, foster, and accelerate fundamental research in cybersecurity. This announcement arose from the considerable interest in closer research collaborations, expressed by the US and Brazil research communities in cybersecurity at two recent US-Brazil Workshops on Cybersecurity and Privacy (see http://www.usbrazilsec.org).

NSF and RNP/CTIC request joint research proposals submitted separately to both NSF and RNP/CTIC using the proposal submission process specific to each agency. Research topics of special interest to NSF and RNP/CTIC are: (1) security and privacy in networks; (2) the Internet of Things and cyber-physical human systems; and (3) malware detection. These topics that are of considerable mutual interest recognize the emerging threat and new opportunity in an increasingly networked world of people and smart technologies as well as the urgent need to address the societal challenge of cybersecurity. NSF strongly encourages new collaborations pursuant to this DCL.

The research topics submitted by US-based researchers to NSF should be consistent with the research goals of NSF's Secure and Trustworthy Cyberspace (SaTC) program (https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504709) . NSF expects to fund a small number of US-based researchers through the EArly-Concept Grants for Exploratory Research (EAGER) funding mechanism (see Section II.D.2 of the NSF Grant Proposal Guide (GPG) at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg) to enable collaboration with their participating Brazil-based researchers. RNP/CTIC expects to fund the same number of grants to enable Brazil-based researchers to collaborate with participating US-based researchers.

NSF and RNP/CTIC are coordinating on a two-phase proposal submission process. The first phase requests two-page white papers of proposed research with at least one US-based Principal Investigator (PI) and at least one Brazil-based PI.

For the first phase, US-based researchers should send their white papers via email to the cognizant NSF program directors at usbrazilsec@nsf.gov. The white paper must include the names of the US-based PIs and their participating Brazilian collaborators, the proposed research plan, and a collaboration plan.

The second phase requires US-based researchers to submit a full EAGER proposal to NSF via FastLane or Grants.gov with at least one US-based PI and at least one Brazil-based collaborator, following the

guidelines for an EAGER proposal. Proposal title must begin with "EAGER:USBRCCR:" followed by project-specific text, i.e., "EAGER: USBRCCR: Title". The proposal must include a statement in the description justifying why the proposed research is exploratory and in what sense it is "high-risk, high-payoff". In addition, the proposal should include supplementary documents: 1) a biographical sketch in the NSF format for each Brazil-based collaborator; 2) a collaboration plan of up to two pages; and 3) a list of participating institutions and key personnel.

The outcome of a Phase 1 submission will be a non-binding joint recommendation from both NSF and RNP/CTIC whether to proceed to Phase 2. The outcome of Phase 2 will be a joint recommendation from NSF and RNP/CTIC whether to award the proposed US-Brazil research collaboration.

Brazil-based researchers must follow the guidance from RNP/CTIC for RNP/CTIC proposal submissions (see https://jems.sbc.org.br/br_us_cybersec2016).

Submissions from teams of US-based and Brazil-based researchers to NSF and RNP/CTIC respectively must have the same technical descriptions, biographies, collaboration plans, participating institutions, and key personnel, along with comparable budgets. Please note that the proposed budgets must request funding for travel to two grantee meetings. For budgetary planning purposes, proposers should assume that one meeting will be held in Brazil and the other will be held in the US.

NSF and RNP/CTIC will share with one another the white papers, proposals, and any unattributed reviews.

The deadline for the two-page white papers for both agencies is December 16, 2016, with a non-binding recommendation by January 16, 2017, regarding the novelty of the proposed research and how well the submission fits the priorities of NSF and RNP/CTIC. The deadline for full proposals is March 16, 2017 for NSF, and March 17, 2017 for RNP/CTIC. Projects are expected to start in September 2017.

The anticipated funding amount is $1,500,000 from NSF and $1,500,000 from RNP/CTIC. Each award can be up to $300,000 from NSF and up to $300,000 from RNP/CTIC, for a duration of no more than two years.

For further information, please contact the cognizant NSF program directors, Dr. Wenjing Lou (wlou@nsf.gov) and Dr. Ralph Wachter (rwachter@nsf.gov), and/or the RNP/CTIC program manager Wanderson Jesus (br-us-cybersec@rnp.br).

Sincerely,

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SaTC is a multidisciplinary activity led by NSF's Directorate for Computer and Information Science and Engineering (CISE).