National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

Dear Colleague Letter for the Division of Mathematical Sciences with the title "Mathematical and Statistical Research for Threat Detection"

Dear Colleague:

The Division of Mathematical Sciences (DMS) at the National Science Foundation (NSF) has a long history of supporting scientific research to develop technology in order to secure the national defense. We expect, beginning in FY 2009, to form a partnership with the Defense Threat Reduction Agency (DTRA) to develop the next generation of mathematical and statistical algorithms and methodologies in sensor systems for the detection of chemical and biological materials as an area of emphasis within the Computational Mathematics program. These new algorithms could be formed, but are not limited to, mathematical research areas such as mathematical modeling, signal processing, statistics, harmonic and geometric analysis, topology, numerical analysis, and optimal control.

The purpose of this letter is to make the mathematical sciences community aware of this upcoming opportunity in order to begin to formulate thoughts and collaborations, and to assemble a diverse group of mathematical sciences researchers who are actively working in the above described research areas to create innovative and novel algorithms and methodologies.

DMS and DTRA recognize the needs and opportunities for the mathematical sciences community to develop technology for controlling and reducing the threat from biological and chemical attack. We seek ambitious, transformative, and creative research proposals from individual PIs and collaborative groups in the mathematical sciences community. Proposals should have in the title ATD (Algorithms for Threat Detection) and should be submitted to the Computational Mathematics program of DMS within the submission window from December 1 to December 15.

Please see www.nsf.gov/funding/pgm_summ.jsp?pims_id=5390&org=DMS&from=home for additional information.

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Sincerely,

Peter March
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