BIOINFORMATICS

The urgency of anticipating and preparing for terrorist attacks became obvious on September 11, 2001. In response to the need for fast, accurate real-time detection and identification of emerging chemical and biological agents, the Department of Homeland Security (DHS) began funding the development of new technologies in this area.

The Information Sciences Division received DHS funding for a collaborative project with Professor Andrew Ellington of the University’s Department of Chemistry and Biochemistry (see http://www.ellingtonlab.org). The objective of this project is to develop a process that will create sensors/receptors within two weeks from the time a new threat is identified. To this end, ISD has developed a secure computing facility with a Beowulf cluster and Biosafety Level 2 lab, and is pursuing the computational design, fabrication, and testing of receptors for a number of targets.

For further information regarding SPD’s work in bioinformatics, please contact:

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