

## **Small Business – Big Player in Discovering Human Stress Behaviors Hormone**

*Defense Research Projects Agency (DARPA) has awarded a Small Business Innovative Research (SBIR) grant to Polestar Technologies to refine methods of monitoring Oxytocin as it relates to Post Traumatic Stress Disorder (PTSD) and interpersonal tension.*

Needham Heights, MA ([PRWEB](#)) October 17, 2013 -- Can a simple blood test predict the extremes of a person's behavior? The keys that unlock this mystery are seeded in levels of a hormone – Oxytocin, which is a peptide widely known for its part in reproduction and childbirth. Recently, the character of oxytocin as a neuromodulator in the central nervous system of humans has been recognized. It is now known that oxytocin plays an important role in a variety of complex social behaviors. For instance, high peripheral oxytocin levels have been associated with better relationship quality. It is also realized that oxytocin can affect human stress behaviors, interpersonal relations, and even wound healing. In order to understand the role of oxytocin in stress and interpersonal relations, scientists need a sensitive assay that is specific for oxytocin. Current immunoassay-based methods do not have either the sensitivity or specificity needed to deepen our understanding of the function of this important neuro-hormone. Under a contract recently awarded by DARPA, Polestar will develop a novel assay for oxytocin based on molecular imprinting. This assay will enhance the molecular sensitivity and specificity that scientists need in order to understand the role of oxytocin in the full range of human behavior.

Polestar Technologies is a woman owned and managed small business, located in Needham Heights, Massachusetts. Polestar has been a recognized industry leader in optical sensing, and measurement and monitoring technologies since 1993. Polestar Technologies provides a full suite of monitoring and sensor products, chemical process technology consulting, and scientific research for a variety of commercial and government clients. For more information, please visit <http://polestartech.com>



**Contact Information**

**Timothy Bortz**

Polestar Technologies Inc

<http://polestartech.com>

+1 6177758510

**Jim Biagioni**

Polestar Technologies Inc

<http://polestartech.com>

781-449-2284

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