

## FireHUD Awarded Competitive Grant from the National Science Foundation

*Small Business Innovation Research Program Provides Seed Funding for R&D*

Atlanta, Georgia, January 1, 2018 FireHUD has been awarded a National Science Foundation (NSF) Small Business Innovation Research (SBIR) grant for \$224,143 to conduct research and development (R&D) work on a Biometric Internet of Things (IoT) System for First Responders.

The broader impact/commercial potential of this Small Business Innovation Research (SBIR) Phase I project is to improve the safety of firefighters through the research and development of a real-time, wearable sensor system comprising a biometric heads-up display and accompanying analysis tools. This device collects each firefighter's vital signs in real-time, displays the information via a heads-up display, and alerts them if they are in danger. Simultaneously, it will send the data to authorized officials for real-time strategic decision-making. By receiving access to life-critical information, the commander can make informed decisions on the allocation of key resources during the hectic scene of an emergency. Firefighting is chaotic; every year over one million firefighters risk their lives to protect others. Over 50% of the deaths in firefighting are caused by overexertion and stress, which can induce heart attacks as well as other serious medical issues. Furthermore, around 70,000 firefighting injuries occur each year. The proposed system aims to reduce the amount of firefighting injuries and subsequent costs, which totaled \$7.8 billion in 2004.

“The National Science Foundation supports small businesses with the most innovative, cutting-edge ideas that have the potential to become great commercial successes and make huge societal impacts,” said Barry Johnson, Director of the NSF’s Division of Industrial Innovation and Partnerships. “We hope that this seed funding will spark solutions to some of the most important challenges of our time across all areas of science and technology.”

“With this support from NSF, we are able to launch pilot studies with several local fire departments,” Zachary Braun, FireHUD CEO and Principle Investigator, said. “These studies will enable, for the first time, the real-time monitoring of extreme fire incidents on our nation’s first responders. We believe the results from this data could end up saving lives.”

Once a small business is awarded a Phase I SBIR/STTR grant (up to \$225,000), it becomes eligible to apply for a Phase II grant (up to \$750,000). Small businesses with Phase II grants are eligible to receive up to \$500,000 in additional matching funds with qualifying third-party investment or sales.

NSF accepts Phase I proposals from small businesses twice annually in June and December. Small businesses with innovative science and technology solutions, and commercial potential are encouraged to apply. All proposals submitted to the NSF SBIR/STTR program undergo a rigorous merit-based review process.

To learn more about the NSF SBIR/STTR program, visit: [www.nsf.gov/SBIR](http://www.nsf.gov/SBIR).

**About the National Science Foundation's Small Business Programs:** *The National Science Foundation (NSF) awards roughly \$200 million annually to startups and small businesses through the Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) program, transforming scientific discovery into products and services with commercial and societal impact. The non-dilutive grants support research and development (R&D) across almost all areas of science and technology helping companies de-risk technology for commercial success. The NSF is an independent federal agency with a budget of about \$7 billion that supports fundamental research and education across all fields of science and engineering.*

