

TechConnect Ventures Sprint Challenge Brief: Wearable biometric sensors for real-time health or performance monitoring

Sprint Submissions Closed

DESCRIPTION

In collaboration with a Non-Profit Leader in R&D collaboration management, TechConnect Ventures is seeking novel materials, textiles and technologies that can enable the measurement and monitoring of performance metrics, physiological health and/or medical diagnostics in smart apparel or personal, wearable devices.

Innovators from every sector are invited to submit a response, including - but not limited to - industry, national labs, non-profits, consultants, start-ups, small business and medium to large corporations.

OPPORTUNITY

Top technologies will be considered for both current and future development, funding, licensing and acquisition Opportunities. The Sprint Sponsor may also consider select responses for additional support, coaching and/or matching of technologies to future technology development needs and opportunities within its portfolio of corporate and government funding programs.

TechConnect Top Innovators: TechConnect may select one or more highly impactful responses ("Top Innovators") to participate in an upcoming TechConnect Conference, Expo, Showcase, or Virtual Pitch Event.

BACKGROUND

Wearable biosensors have received increasing attention over the past decade with emphasis in the medical and healthcare industry to measure critical physiological signals such as blood pressure, heart rate, hydration, respiratory rate, and skin temperature, among others. These metrics are essential for care and real-time evaluations of chronic conditions, effective monitoring during traumatic events, or after-treatment and therapeutic care. Incorporation of biosensors into garments and accessories such as for clothing, helmets, and bandages as well as stretchable electronic devices have increased their utility and significantly improved clinicians' ability to monitor and even diagnose patients from afar. Expanded use of these technologies has direct applications for continuous monitoring of individual health characteristics for any number of situations, including in-field workers, public safety personnel, athletes, the military and much more.

The objective of this request is to identify technologies and other innovative solutions that can allow for monitoring of critical physiological metrics through integration into comfortable wearable devices and apparel. Technologies that encompass systems-wide solutions including sensor, signal collection and processing, and communication will be considered.

INNOVATION REQUIREMENTS

TCV invites any and all solutions for a wearable device that can measure and monitor any of a wide array of biomarkers. The ideal solution will:

1. Prioritize lightweight and comfort
2. Enable remote monitoring
3. Monitor an array of physiological markers that target general health such as temperature, heart rate and variability, hydration, pulse, blood pressure

POTENTIAL SOLUTIONS

TCV is seeking potential partners of all types and from all industries to propose solutions that may include, but are not limited to:

Smart clothing: wearable devices embedded in garments

- Measures key biometric parameters associated with general health
- Can be worn during significant periods of physical exertion
- Realtime data capture that can be remotely monitored
- Lightweight and unobtrusive

Wearable devices on wrists and head

- Measures key biometric parameters associated with general health
- Rugged and durable in harsh environmental conditions
- Realtime data capture that can be remotely monitored

REMEMBER... We don't know what we don't know!

If your technology is not highlighted above, please [consider submitting a response in order to enhance your exposure to new commercial opportunities.](#)

SUBMISSION REQUIREMENTS

All Submissions must include a completed Submission Webform ([link](#)). Submit only NON-CONFIDENTIAL information

Within the Submission Webform your Entry should address the Problem Statement through the following:

- A non-confidential summary of your technology or innovation, including any technical data and details on performance as it applies to the Problem Statement
- Value proposition and (potential) commercial impact
- Development status and readiness level
- Development and scale-up pathway (if available)
- Intellectual property position
- Funding and award status (if applicable)
- Type of partnership or commercial relationship sought with Innovation Seekers
- Company or organizational profile
- Contact, team and organizational information

Respondents are also invited to upload one (1) supplemental file (max. size 10MB) containing their unique technology pitch, presentation or overview.

EVALUATION

TechConnect Ventures and its client will evaluate all responses. Based on the nature of the innovation and strength of the response relative to all submissions received, top innovators may be selected for further discussions or pitches which may lead to contractual or commercial engagements for the research, development or commercialization of the most promising technologies.

QUESTIONS?

Contact info@techconnectventures.com and reference the Sprint Topic.

PARTICIPATION RULES & GUIDELINES

Solvers are encouraged to review the Rules and Guidelines provided on the Sprint page for details about participation, including submission criteria, eligibility information, and more.

QUESTIONS? Contact Executive Director, Nick Kacsandi at info@techconnectventures.com