

TESTIMONY OF TERRY N. COLLINS
Co-Founder & Chief Executive Officer, Blue Sources, LLC

**Senate Small Business &
Entrepreneur Committee**
Thursday, August 8, 2019

Senator Cardin, thank you for the opportunity to appear before this committee to discuss Blue Sources' experiences using small business resources provided by federal, state and local government as available in Frederick County, Frederick City and the State of Maryland.

Officers of the Corporation

CEO & Co-Founder, Terry N. Collins
Executive Chair & Co-Founder, PJ Bellomo
Federal Business Development & Co-Founder, David E. Barr

I would like to thank Kathie Callahan Brady of FITCI for her cooperation in working together on this testimony over the past week.

BLUE SOURCES, LLC

Blue Sources provides a product and a service to detect acutely toxic chemicals in drinking water sources and wastewater effluent. Our customers are public water utilities, industrial wastewater treatment facilities and the US military.

Our aquatic biomonitor product relies on a group of bluegill fish to constantly test water for acute levels of toxins by using computer algorithms to measure a fish's biological responses, such as respiratory rate. The aquatic biomonitor is essentially an early warning system. The



fish tell us when something is wrong with the water before we might normally know.

Blue Sources was formed in the second quarter of 2015 after discovering the aquatic biomonitor technology at a Technology Transfer conference at the BWI airport Marriott in Q4 of 2014. The aquatic biomonitor technology was invented and developed by the US Army Center for Environmental Health Research (USACEHR) at Fort Detrick, MD. A USACEHR research scientist at the conference explained the operation of the aquatic biomonitor and how the bluegill fish manage to tell us when toxic chemicals are present in our drinking water sources and wastewater effluent.

A short time after that initial meeting Blue Sources signed a patent license agreement with the US Army and a Cooperative Research and Development Agreement (CRADA) with USACEHR.

OFFICE OF RESEARCH AND TECHNICAL APPLICATIONS – TECH TRANSFER

Federal technology transfer is a massive opportunity to license technology invented in defense labs and use it to build, innovate, or expand businesses. Discoveries made by federal scientists and engineers are patented and then offered for businesses to license, which enables businesses to commercialize the technology and then sell to the private sector or back to the military. The US Army's Office of Research and Technical Applications (ORTA) facilitated the Tech Transfer process and agreements required to transfer the technology and knowledge.

The two mechanisms most often used by federal laboratories for technology transfer are patent licensing agreements and Cooperative Research & Development Agreements (CRADAs). The legislation creating technology transfer and the CRADA established the requirement that a company or entrepreneur applying to license a federal government invention must submit a plan for development and marketing of the invention and make a commitment to bring the invention to practical application within a reasonable amount of time.



PATENT LICENSING - TECHLINK

TechLink is the DODs partnership intermediary organization that facilitates technology transfer between federal labs and the private sector. The process of licensing technology from a federal laboratory, from start to finish, usually takes six months but can be as short as one month.

TechLink was the intermediary between Blue Sources and the US Army patent attorneys. TechLink's assistance and guidance was instrumental in paving the way to easily acquiring our exclusive patent license with the US Army.

CRADA

A CRADA is a written agreement between a government laboratory and a private party to work together on the research and development of new technologies. Our CRADA with USACEHR afforded Blue Sources with a way to collaborate and build valuable relationships within the USACEHR organization.

Our CRADA with USACEHR is the primary tool by which technology and technical expertise is transferred from USACEHR to Blue Sources. Our CRADA allows USACEHR to provide staff, access to facilities, equipment, data, and other resources (but not funding) with payment, without repayment or by providing in-kind services by Blue Sources. Having this level of access to USACEHR was critical to our successful commercialization of the Fish Biomonitor System (FBS).

FREDERICK INNOVATIVE TECHNOLOGY CENTER, INC.

The Frederick Innovative Technology Center, Inc. (FITCI) is a business incubator and accelerator designed to cultivate entrepreneurship. Business incubators drastically reduce the risk of small business failures by providing entrepreneurs with the tools necessary to create a solid business foundation.

Blue Sources joined FITCI in July 2016 when we realized that we needed help in getting Blue Sources off the ground. We had experience in running an existing business but had never started a business from nothing. Kathie



Callahan Brady found Blue Sources that summer and convinced us that we would benefit from the programs and connections she could offer. She was right.

As CEO of Blue Sources, I participated in FITCI's Strategic Growth and Advisory Board and other advisory/coaching programs. Kathie Callahan Brady introduced us to the Maryland Technology Development Corporation. TEDCO provides resources and connections that early stage technology companies need to thrive in Maryland including funding.

Blue Sources maintains an office at FITCI in an environment that is conducive to success. Everything we need as a business can be obtained in some way through FITCI.

As we progressed through programs at FITCI it became apparent that Blue Sources needed an experienced resource to guide us through the process of starting, funding and growing our business. Kathie Callahan Brady introduced us to PJ Bellomo who had taken several early stage businesses from nothing to success. PJ joined Blue Sources as a full share partner in January 2017 and was key to helping us obtain our SEED funding from TEDCO and other sources.



THE MARYLAND TECHNOLOGY CORPORATION OF MARYLAND - TEDCO

TEDCO

TEDCO provided Blue Sources with the mentoring, resources, expertise and connections to find seed funding. Our first contact with TEDCO was Chuck Ernst, a Rural Business Innovation Mentor for the western region which includes Frederick County. Chuck Ernst introduced us TEDCO programs and helped us navigate the process of applying for SEED Funding.

As we prepared our pitch to TEDCO for funding Chuck mentored our progress throughout the funding process. SEED funding was received from TEDCO Q2 2017. Blue Sources had the funding to commercialize the fish biomonitor technology developed by USACEHR. A commercially viable fish biomonitor product was completed and available for sale in Q1 2019.

ADDITIONAL FUNDING

With the SEED funding provided by TEDCO Blue Sources completed several production ready FBS devices. This will give Blue Sources the jump start needed close additional sales and to raise investor funds for expansion

BOOTSTRAPPING

In Q4 of 2019 Blue Sources will sell multiple units to several Washington, DC area water utilities. Some of these utilities have committed verbally to purchases once they have received funds from a grant applications submitted by the Metropolitan Washington Council of Governments (MWCOCG) to the USDHS Urban Area Security Initiative grant program These grants were awarded in May 2019 and the utilities will receive their portion of the grant in October of 2019.

Funds from the sale of these FBS units to the DC area water utilities will be plowed back into the business for marketing, additional manufacturing of more FBS units and hiring Blue Sources first employees. Essentially, we will bootstrap the next phase of growth.

LARGE INVESTOR FUNDING



Now that Blue Sources has traction in the form of product and subscription service sales, we can begin the search for larger investors for our first round of funding to continue hiring, expansion of our direct sales effort and implementation of our program of contracting with existing water industry distributors and service providers to build a national presence.

