

Technical Fellow of Research & Business Development Advanced Manufacturing & Additive Technologies

Organization: Youngstown Business Incubator (YBI)
Location: Youngstown, Ohio
Employment Type: Full-time
Reports To: Chief Manufacturing Officer

Position Overview

YBI is seeking a highly motivated Technical Fellow of Research and Business Development to support YBI's advanced manufacturing and additive manufacturing initiatives, with a primary focus on supporting the activities of the Youngstown Innovation Hub for Defense and Aerospace.

This position will work directly for YBI while playing a key role in advancing the Innovation Hub's mission to accelerate additive adoption of additive and advanced manufacturing technologies for defense, aerospace, and industrial applications. The role bridges applied research, federal program development, regional supply-chain engagement, and the development of shared-use, fee-for-service technical services that support manufacturers across Northeast Ohio and the broader Midwest.

Key Responsibilities

Business Development, Commercialization & Innovation Hub Support

- Identify, pursue, and develop business development opportunities aligned with YBI's advanced manufacturing strategy and the Youngstown Innovation Hub's defense and aerospace focus.
- Support commercialization and technology transition efforts that move innovations from TRL/MRL development into pilot and production environments.
- Engage OEMs, tier suppliers, foundries, tooling and mold shops, and additive manufacturing service providers throughout Northeast Ohio and the Midwest.
- Represent YBI in engagements with industry partners, government agencies, academic institutions, and regional economic development organizations.

Shared-Use & Fee-for-Service Program Development

- Lead the design, launch, and expansion of YBI's internal fee-for-service and shared-use technical services, in coordination with Innovation Hub activities.
- Develop service offerings, engagement models, and pricing strategies for reverse engineering, 3D scanning and metrology, rapid prototyping, additive manufacturing, and mold/tooling design.
- Align service capabilities with regional manufacturing needs, workforce development priorities, and defense supply-chain requirements.
- Support utilization of YBI and Innovation Hub equipment and facilities by industry partners, small businesses, and startups.

Grant Writing & Federal Program Development

- Lead and support competitive proposals for SBIR/STTR, Department of Defense, and manufacturing-focused federal funding programs.
- Integrate YBI capabilities, Innovation Hub assets, and sustainable revenue models into grant proposals and long-term program strategies.
- Coordinate proposal development across YBI staff, technical teams, academic partners, and administrative stakeholders.

Research, Technical & Market Analysis

- Conduct applied research and market analysis related to additive manufacturing, advanced materials, and hybrid manufacturing processes.
- Support applied R&D, demonstration projects, and pilot programs in metal and ceramic additive manufacturing.
- Evaluate manufacturability, scalability, cost, and quality considerations for transitioning technologies into production.
- Prepare technical reports, white papers, and sponsor-facing deliverables.

Required Qualifications

- PhD preferred (master's degree with significant relevant experience will be considered).
- Demonstrated experience in federal grant writing, particularly SBIR/STTR programs.
- Strong applied research and technical analysis capabilities.

- Working knowledge of additive manufacturing and 3D printing technologies.
- Excellent written and verbal communication skills.

Preferred / Bonus Qualifications

- Experience working with or supporting programs for the U.S. Department of War
- Experience building or managing shared-use, fee-for-service, or applied research service models.
- Familiarity with Northeast Ohio and Midwest manufacturing supply chains, including metal additive manufacturing, 3D-printed ceramics, castings, foundry operations, mold design, tooling, and hybrid manufacturing.
- Experience supporting technology transition, scale-up, or manufacturing readiness initiatives.

Why Join YBI

- Opportunity to work directly for YBI, a national leader in advanced manufacturing innovation.
- Direct role in supporting the Youngstown Innovation Hub for Defense and Aerospace.
- Access to state-of-the-art additive manufacturing, scanning, and prototyping capabilities.
- Collaborative environment connecting startups, manufacturers, academia, government, and workforce partners.
- Meaningful impact on defense, aerospace, and industrial supply chains in Northeast Ohio and the Midwest.

Send resumes to: Stephanie Gaffney <sgaffney@ybi.org>