

Ohio Federal Research Network

Driving Innovation Through Strategic Partnerships

Visit us online! www.ohiofrn.org

Round 7 Information Session

Administered by:





Funded by:



Department of Higher Education



Agenda

- Welcome Introductions
- OFRN Briefing
- Federal Partner AOI Q&A with SMEs
- Proposal Training
- Resources
- Conclusion



OFRN Goals





- Increase the amount of Federal Funding that flows to Ohio
- Support the types of Federal projects on which Ohio's federal partners are focused
- Increase the extent to which OFRN produces
 enhanced collaboration among institutions/industry
- Develop lasting and sustainable knowledge that allows academic institutions/industry to improve their ability to compete for federal resources over time

OFRN Construct





OFRN Program Impact – through 12/11/2024 🔀





Project Teams Must Include at least:

- 1 Ohio industry member
 - Role can be as lead applicant or collaborator
- 2 Ohio colleges/universities
 - Role can be as lead applicant or collaborator
 - Air Force Institute of Technology (AFIT) is eligible

1 Federal partner/sponsor

- AFRL, NASA-GRC, NAMRU-D, and/or NASIC
- Financial commitment from federal partner is NOT necessary



Projects MUST meet the following criteria:

- Projects Must be <u>Applied</u> Research:
 - S&T Activities 6.2/6.3 as outlined by Government-Wide and DoD Definitions.
 - No Basic/Foundational Research will be accepted.
 - Technology Readiness Level (TRL) 3 or higher.



Proposals consist of:

- Technical Proposal
 - Main Technical Proposal (8 pages)
 - Proposer Prepared Statement of Work (no page limit)
 - Student Experiential Engagement SEE (2 pages)
 - Technical Proposal Supplement (2 pages)
 - Quad Chart (1 page)
 - Technology Readiness Level (1 page)
- Business and Cost Proposal



- Round 7 includes a requirement for a Student Experience and Engagement Initiative (SEE) which is to be designed by the proposing team based on the guidelines within the Appendix 2
- Team Matchmaking Assistance
- Training
 - March 6, 2025 (webinar) Proposal training (mandatory)

Key Dates



Event	Key Date
Opportunity Announcement Formal Release	February 4, 2025
Opportunity Announcement Informational Session and Q&A with Federal SMEs (3 virtual sessions)	February 10, 2025 (10-11:30 am) February 25, 2025 (1-2:30 pm) March 20, 2025 (8:30-10 am)
Offerors Conference & Proposal Training*	March 6, 2025 (8:30 – 11:30 am)
Proposal Questions Accepted Through	April 18, 2025, by 5:00pm ET
Due date for Proposal Submissions	April 28, 2025, by 5:00pm ET
Notification of Selection of Finalists	May 30, 2025
Finalists' Sessions with TRC (if requested)	June 16-20, 2025
Awards Announced	July/August 2025
Projects Start	September/October 2025

*Attending or viewing the Offerors Conference & Proposal Training is mandatory for all proposal submissions. At least one (1) member of the proposal team needs to attend

Round 7 Areas of Interest



AOI	AOI Name	Subtopic 1	Subtopic 2			
1	Hypersonics	Materials and Technology to Enable Variable Geometry of Aerodynamic Surfaces	High Speed Aircraft Thermal Management and Heat Rejection Technology			
2	Health and Human Performance	Al supported medical decision making for triage and stabilization by non-specialists	Al supported logistics planning for operational commanders			
3	Aerospace Power Management, Materials, and Distribution	Aerospace Electrification – Relevant, HV/HP, Fault-Smart Switch Gear	Safe Partial Discharge Corona aware high voltage cable for aerospace (description needed)			
4	Commercial Space - LEO	Low Leakage Cryogenic Valves	Space-Based Space Situational Awareness			
5	Quantum Technologies	Sensing and timing systems with reduced bias error or increased sensitivity	System component or integration technologies to enable miniaturization, increased function, or operation in mission relevant or extreme environments.			
6	Autonomy	Autonomous systems operations	Operator defined metrics for trusted autonomy			
7	Advanced Materials Technology - Critical Materials Supply for Aerospace	Methods for Production, Joining, and Modeling of Oxide Dispersion Strengthened (ODS) Alloys	Thermally Conductive, Electrically Insulating Materials			

AOI #1 Hypersonics



- 1. Materials and Technology to Enable Variable Geometry of Aerodynamic Surfaces
- 2. High Speed Aircraft Thermal Management and Heat Rejection Technology

AOI #2 Health and Human Performance



- 1. Predictive AI to support medical triage, life-saving interventions, and medical logistics utilization across the continuum of En route care
- 2. Al supported logistics planning for operational commanders

AOI #3 Aerospace Power Management, Materials, and Distribution



- 1. Aerospace Electrification Relevant, HV/HP, Fault-Smart Switch Gear
- 2. Safe Partial Discharge Corona Aware High voltage Cable for Aerospace





- 1. Low Leakage Cryogenic Valves
- 2. Space-Based Space Situational Awareness



AOI #5 Quantum Technologies

- 1. Sensing, timing, and absolute calibration systems with reduced bias error or increased sensitivity
- 2. System component or integration technologies to enable miniaturization, increased funding, or operation in mission relevant or extreme environments

AOI #6 Autonomy



- 1. Autonomous Systems Operations
- 2. Operator defined metrics for trusted autonomy

AOI #7 Advanced Materials Technology – Critical Materials Supply for Aerospace



- 1. Methods for Production, Joining, and Modeling of Oxide dispersion Strengthened (ODS) Alloys
- 2. Thermally Conductive, Electrically Insulating Materials







First of its Kind

Micro-Electronics Innovation Center

OMIC is a non-profit 501(c)(3) experiential learning program providing cost-effective support for technology startups and industry in Ohio, SBIR/STTR partners throughout the US, and provides to industry fresh STEM graduates with real-life engineering, science and entrepreneurial experience.

Facilities and Capabilities

Fully Equipped Elex Production Broad Technical Capabilities Experienced Mentors STTR Partner Eligible

501(c)(3) Non-Profit









Innovatingohio.org

OMIC's Multi-Point Mission



Innovatingohio.org 4621 Lyman Dr. Hilliard, OH 43026 Fill Gaps in Technology Commercialization with Dual Mission of *R&D* and *Workforce Development* Provide Real, Experiential Opportunities for STEM-based Students and Valuable Outcomes for Industry – Workforce Development Mission

Revitalize Micro-Electronic Design and Manufacturing in Ohio with Unique Engineering and Production Resources – R&D Mission



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Provide Real

OMIC's Multi-Point Mission



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Innovatingohio.org

Missio

Our Story



Youngstown Business Incubator

- Founded in 2001 as B2B Software Incubator
- Named #1 University Affiliated Incubator in the world in 2014
- Work with early stage Advanced Manufacturing Startups and with

Existing Small Businesses

• Added advanced Manufacturing capabilities to the portfolio of

services in 2012 with America Makes on our campus



Programs





Advanced Manufacturing Team

YBI Advanced Manufacturing TEAM

- \$75M in Government Funding
- Have lead and partnered on 30+ state, Federal and private grants and projects entered into the supply chain
- Have extensive Expertise in the following
 - 3D printed Sand cores Humtown Products, YSU, UNI, AFS
 - Deep connection with regional industry with over 300 project partners
 - Support in design, reverse engineering, printing, post processing, supply chain development, business case development, etc.
 - In house capabilities in XJet Ceramic Printer (Alumina), DMLS with EOS and Velo and mid size pellet printing.
 - Previous Parallax Advanced Research projects- AFWERX APEX OFRN-AAMEN and SEE



ADVANCED MANUFACTURING 200 plus SMMs



Stephanie Gaffney Vice President, Advanced Manufacturing C: 330.503.0561 0: 330.746.5003 E: sgaffney@ybi.org





Entrepreneur Resources

Experienced Advisors and EIRs Services Partner Network Nationally Recognized Programs

Business Advice Business Services Network Development Mentoring Access to Capital Dedicated EIRs Commercialization Training Licensing / JV Support Financial Planning Marketing / Market Planning IP Strategy / Planning Leadership Recruiting Grant Proposal Strategy





Space

The Hub Powered by PNC Bank





100,000 ft² innovation space

State-of-the-art AV capabilities

Office, conference room, and event spaces

140+ resident companies

Managed by EC, collaboration with University of Dayton



Thank you!

Mike McCann VP, Innovation and Engagement mmccann@ecinnovates.com

© Entrepreneurs' Center Powering Progress & Prosperity

Resource for Team Matchmaking



Round 7 Requires

- Two Universities in Ohio
- One Industry Partner in Ohio
- A Federal Collaborator

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ATTACHMENT 2 - DOELCOST WORKSheet	
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ATTACHMENT 4 - OFRN OCI	
ATTACHMENT 5 - Cost Share Guidelines	
Team Matchmaking Services	
The Matchmaking tool was created for those wanting to pursue t	the OFRN Round 7 colicitation and in need of a cogulard partner or a subcontractor with particular talents to fill a gap on the
proposal, or wanting to offer services as a potential partner or su	bcontractor click here to go to the Matchmaking tool
• •	The Ohio Codest Descent Natural (ACON) is a second wavened by Deciliar Advanced
Ohio	Research Corporation in collaboration with The Ohio State University and funded by the
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Network	Mar Ohio Federal
Driving Innovation Through Strategic Partnerships	Research Network
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	Round 7 Matchmaking
	OFRN is providing this partnering and matchmaking service to help those that need to find a required partner(s) or are looking to join a team for an OFRN proposal. To assist in providing
	introductions, we need to know more about you, your organization, and your requirements for a partner(s). Please thoroughly complete the form below. You will be prompted to update delete your information after six months of a the inclusion to help keen our database current and undate OERN will facilitate all requested introductions. It is in to you whether you
	to pursue them.
	Sign-Up below to list skills sought for a required partner or to list your skills to join a team for an OFRN proposal
	After signing up, to requestan introduction, select Partner Inquiry below
	Partner Inquiry tips:
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If you NEED a Partner

- To Satisfy Requirements
- To Fill a Technical Gap

If You are looking to JOIN a Team

To Offer Capabilities

Go To OhioFRN.org - Round 7 Solicitation

- Team Matchmaking Services
 - Sign Up
 - Advertise your need
 - Advertise what you have to offer a team
 - Partner Inquiry
 - View submissions
 - Request introduction
 - OFRN makes introduction

- Partner Inquiry
 - View submissions
 - Request introduction

	Matchmaking Partner Inquiry											
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ID#	Organization type	Agency interests	Capabilities offered		Equipment & facilities	Organization area of interest(s)	Other offerings	Ρ	artner capabilities sought	Partner type	Partner area of interest(s)	Other partner skills sought
50	Academic		We build quantum informatic processing units out of atomi These processing units are lan programmable quantum devi can manipulate hundreds to to of qubits. They feature progra	n c qubits. ge-scale, ces that housands immable		 7.5.a. Quantum Technologies: Sensing and timing systems with reduced bias error or increased sensitivity 	We are constructing two neutral atom quantum computers at our organization, for research into quantum algorithms, quantum computing, quantum simulation, quantum networking, quantum	W ir q fu fu d	le are seeking fiber or photonic ttegration with arrays of atomic ubits. In order to make compact uantum network nodes (for a ture quantum internet or istributed quantum sensing), it	Industry partner	 7.5.a. Quantum Technologies: Sensing and timing systems with reduced bias error or increased sensitivity 	

Questions



Round 7 Questions

- ofrn-question@parallaxresearch.org
- Frequently Asked Questions (FAQ)
 - Q&A posted in FAQ
 - FAQ link found on Round 7 Solicitation Page – before Resources



Resource for Federal Collaborator



Contact OFRN if you don't already have a relationship with a Federal lab in Ohio to collaborate on your project

OFRN-Question@parallaxresearch.org

Subject: Federal Collaborator needed

Information to include:

- Name
- Organization
- Email / phone
- AOI subtopic
- Information about your project that may be useful in finding a federal collaborator



Thank you

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Becky Mescher, Program Coordinator OFRN Becky.Mescher@parallaxresearch.org

Round 7 Questions OFRN-question@parallaxresearch.org

> OFRN Website https://ohiofrn.org





https://ohiofrn.org

ofrn-question@parallaxresearch.org