Ohio Federal and Military Jobs Commission (OFMJC) Support Improving Ohio's Economy Through R&D



Sept 11, 2015



- Budget Allocations for FRN Network
- Organizational Construct to support FRN
- Charters for ERB and TRC
- ERB and TRC Participants
- White Paper Review Team and Process
- COI for ERB, TRC and White Paper Review Teams
- Overall Schedule and Plans going Forward

 Next Step: Review and Approve White Papers Presented at the Oct 8th FMJC commission meeting.

Budget Allocation for FRN



Budget Lines	FY16 7/1/2015 - 6/30/2016	FY17 7/1/2015 - 6/30/2016	Total
OBOR Workforce Development (WFD) Applied Research Corp (ARC)	\$10M • (AHEAD, APDC, Jobs Ohio, STEM) • (FRN COEs, other)	\$10M • (AHEAD, APDC, Jobs Ohio, STEM) • (FRN COEs, other)	\$20M
OBOR Federal Research Network (FRN) The Ohio State University (OSU)	\$0M	\$5M •\$5M (FRN)	\$5M
		TOTAL	\$25M

The current budget was signed by Governor's Office on June 30th and has the current budget line items to support the Federal Research Network for Wright Patterson AFB (WPAFB) and NASA Glenn Research Center (GRC).



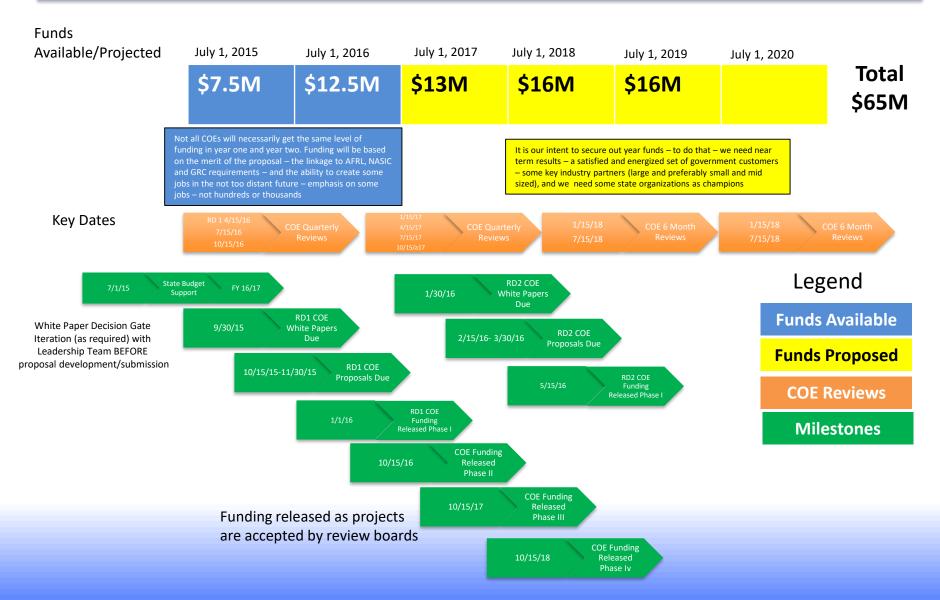
Amounts For Consideration By Leadership Team

Total State Operating Funding for FY 16 and 17 =\$ 25 M

- Aerospace Workforce Development Legacy Programs =\$(3 M)
- FRN Admin., Financial and Organizational Support =\$(2 M)
- Tech Commercialization/Workforce Dev Support (LCCC/CSU) ** =<u>\$(2 M)</u>
- Funding Available for 6 COE's Research and Business Plans =\$ 18 M
- ** Also Will Require White Paper and Proposal



FRN COE Milestones and Funding Profile





- Have Allocated ~\$3M for each COE over the next 2 years.
- Actual COE funding will be determined by the proposal quality and how well the proposals satisfy the evaluation criteria.
 - Incremental funding will be provided based upon an agreed upon delivery milestone schedule and quantitative research performance metrics results.
- Round 1 and Round 2 Funding will be initially equally divided.
 - If we do not get enough quality research proposals we may establish a Round 3 in late CY 16.
 - We might also increase funding for Round 1 Teams if warranted.
- All funding changes will be review and approved by FMJC Commission.

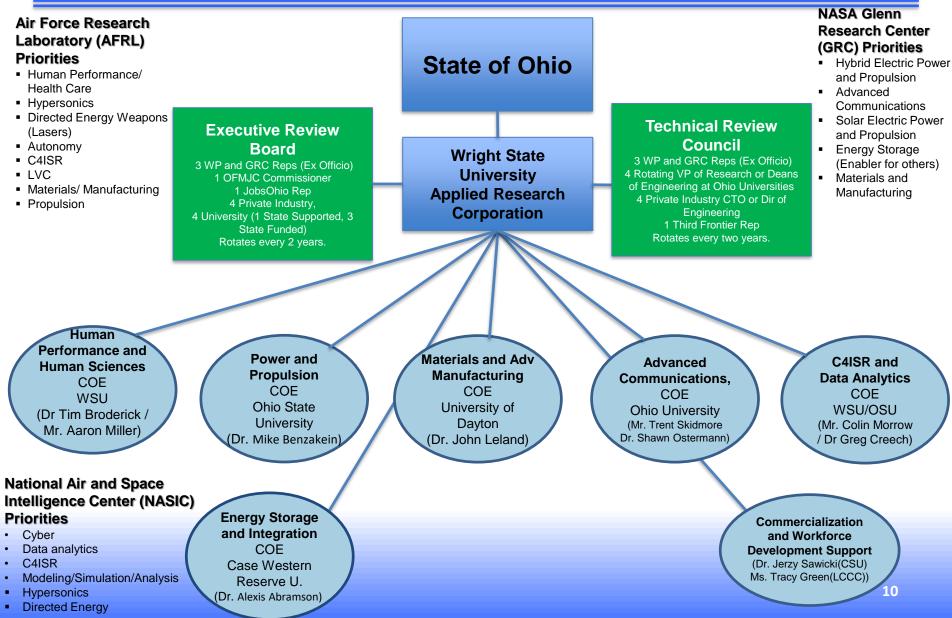


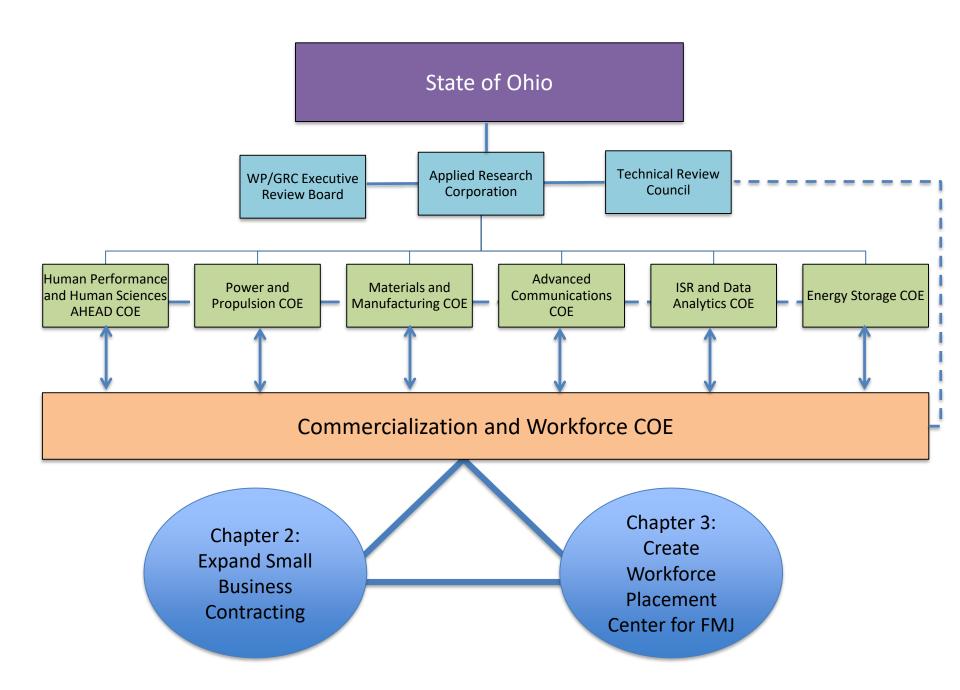
- State funding of \$25M over the Biennium will put a premium on the FRN to produce a return on investment (ROI) to continue the program. Specifically the COE plan must address:
 - Does the proposed project meet the applications/user driven requirements derived from emerging mission priorities of NASA and DOD. <u>This is a go/no go for each project.</u>
 - The degree of alignment with Ohio industries and potential to impact job creation. If there is no industry cost share, then the long term impact to Ohio industry should be considered. <u>This is a go/no go for</u> <u>each project.</u>
 - The Level of collaboration between the universities and with industry. Is the project a collection of independent sub-projects or is it truly an integrated approach to meeting a technical objective of a federal agency or company?
- Resource Allocation Process is Important and each COE Plan will require FRN Executive Review Board (ERB) and Technical Review Council (TRC) approval.
 - Need to prioritize the \$20M Aerospace Workforce Development funding in FY 16 and FY17 to increase ROI. Continuation of existing programs and invest in FRN start-up and business plans.
 - Need to prioritize the \$5M in FY17 to support overall FRN objectives and increase the ROI

Organizational Construct



Construct for Ohio Centric Center of Excellence (COE) Federal Research Network (FRN)

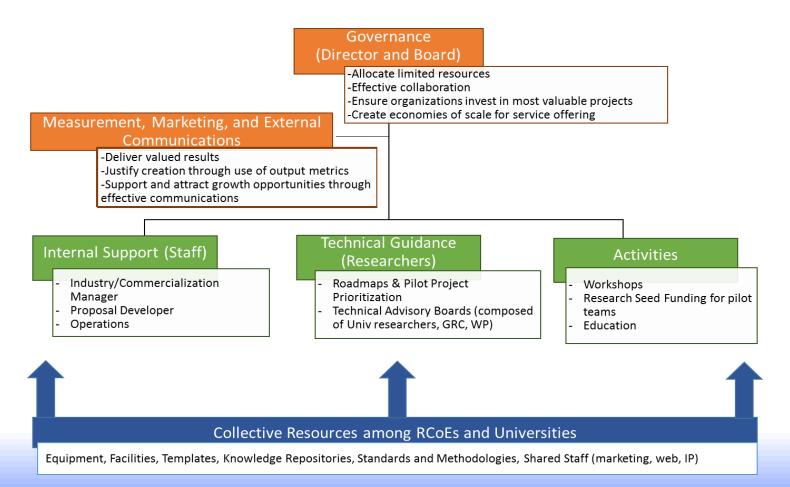






Center of Excellence on TOPIC :

Catalyzing high priority research areas in TOPIC to support WPAFB, NASA GRC needs and grow Ohio economic opportunities





- The WSARC will act as the contracting and program management agent for FRN. Specifically the WSARC will:
 - Lead and oversee all procurement, contracting and financial reporting activities.
 - Nominate the ERB and TRC members that will require FMJC Commission approval.
 - Organize and provide support to ERB and TRC review teams.
 - Support documenting the White Paper and Proposal Review process for FMJC Review and Approval.
 - Manage and mitigate ERB and TRC COIs.
 - Be the funding agent for all COEs.
 - Be the repository of all deliverables under this program.
 - Provide Business Development and Market Research Support to COEs
 - Bottom Line: We will be fully compliant with State and Federal Policies, Rules, Regulations and accounting procedures.

Proposed Charters & Members for ERC & TRC



- The WP/GRC Executive Review Board is responsible to oversee the development, funding and performance of the Ohio Federal Research Network (FRN) of the Federal and Military Jobs Commission. The Executive Review Board (ERB) will provide ongoing oversight of the FRN to support the research priorities of the federal installations and build capabilities within Ohio to expand and focus research, workforce development and technology commercialization. The Executive Review Board will:
 - Ensure that the research agenda for the Federal Research Network advances the state of the art, supports the federal missions of Wright-Patterson and NASA GRC, aggressively pursues commercialization opportunities in Ohio, and maximizes productivity through cross program and infrastructure leverage.
 - Review and approve the Federal Research Network technology framework establishing the context and focus of research programs, highlight relationships between them and map the research activities of other organizations to identify opportunities for synergy and collaboration.
 - Review and approve roadmaps for core Federal Research Network technologies and programs to support the prioritization of programs, monitor progress and link them to Air Force, NASA and private industry market requirements.
 - Review key funding opportunities and proposals for Federal Research Network research programs to ensure alignment with federal and state strategic and operational plans.



- The TRC is responsible to the FMJC and the ERB for comprehensive oversight of the portfolio of technologies that are used and developed by the Research Centers of Excellence (COE) as part of the Ohio Federal Research Network (FRN) in the execution of their programs, including the following specific duties and responsibilities:
 - Assessing proposed architectures and roadmaps for technologies used by the COEs are effectively aligned with WPAFB and GRC missions and priorities
 - Collaborating with COE technology teams to establish common capabilities to support collaboration across the FRN and its public and private partners
 - Reviewing proposals for technology investments by COEs to realize opportunities for synergy and leverage of technologies and other resources between centers
 - Ensuring that a consistent level of security and compliance is achieved across the FRN and in engagements with outside organizations
 - Evaluating the technical merit, broader applicability and commercialization potential for the technologies developed through COE research programs within both the public and private sectors
 - TRC will review the COE proposals and they will be evaluated using the following criteria, listed in descending order of importance



Proposed ERB and TRC Composition Review Team for Proposals

Executive Review Board	Designee
Ohio University Dean of Engineering	Dr Dennis Irwin
Cleveland State	Pres Ron Bergmann
Ohio State University Dean of Engineering	Dr Dave Williams
Wright State University	Pres Dave Hopkins
Case Western Reserve VP of Research	Dr Suzanne Rivera
Lorain County Community College	Pres Roy Church
Ohio Federal Military Jobs Commission	Gary OcConnell
NASA Glenn	Jim Free
AFRL	Jack Blackhurst
NASIC	Curt Rowland
Jobs Ohio	John Miner or Glenn Richardson
Industry 1	Pete Hennessy
Industry 2	Joe Sciabica
Industry 3	TBD
Industry 4	ТВО
Industry 5	TBD

Technical Review Council

Designee

University of Toledo VP of Research Dr Bill Messer University of Cincinnati VP of Research MD William Ball Cleveland State University VP of Research Dr Jerzy Sawicki University of Akron VP of Research TBD Ohio State University vp of Resarch Dr Carol Whitaker University of Dayton TBD WSU Dr Bob Fyffe Ohio Federal Military Jobs Commission Don Campbell NASA Glenn Dr John Sankovic AFRL Dr Morley Stone NASIC TBD Industry 1 Ricky Peters Industry 2 Carlos Gradsinsky Industry 3 TBD Industry 4 TBD Industry 5 TBD 3rd Frontier TBD

Proposed White Paper Review Team and Proces



- AFRL Jack Blackhurst
- AFRL Chris Ristich
- CSU Jerzy Sawicki
- NASA Jim Free
- NASA Joe Shaw
- NASIC Curt Rowland
- NASIC Steve Hayden
- OFMJC Gary O'Connell (Chair)
- OFMJC Don Campbell (Co-Chair)
- OSU Marty Kress
- WSU Dennis Andersh
- STATE Glenn Richardson, Jobs Ohio
- STATE , Third Frontier



Initial Step-Preparation of White Paper

Due date: NLT 9/30/15

- Guidelines/Requirements:
 - Single integrated white paper for each COE.
- The topics the white papers MUST address are:
 - The composition of their COE
 - Pl's by name and institution
 - For each PI the area (s) of expertise/past performance
 - The candidate set of projects proposed for detailed development (not to exceed 6)
 - Project title and description
 - Mapping against Government requirement(s) including short description and Government requirement owner(s)
 - Potential commercialization opportunities
 - Sector of economy for opportunity (e.g. aerospace, advanced energy, IT, automotive)
 - Candidate commercialization partners identified in conjunction with Commercialization and Workforce COE including any identified opportunities for cost sharing in technology development
 - Potential federal government laboratory partnerships (including description of partnerships)
 - Proposed TOP level schedule with deliverables, major milestones, and first order cost estimate
 - Project team composition for proposed effort
 - Key federal procurement activities that can leverage the State COE funding
- Identified cost sharing by COE team members to stand up and execute COE.
- Identified opportunities to explore collaboration between other FRN COE's to achieve project success. (This will secure bonus points on the evaluation)
- Identified possibilities of external to COE partnerships that would contribute to COE objectives.
- Ensure that FRN monies will not to be used to finance projects that were previously funded by AFRL, NASIC, or NASA but that have now been terminated by that Agency.



Following Approval of COE White Papers COEs have up to 45 Days to Submit Detailed Proposal:

- Guidelines/Requirements:
 - Expanded White Paper Outline with Details
 - > Detailed plans for each specific COE research project(s) approved.
 - Detailed description of each project
 - Milestone schedule with key performance metrics and decision gates
 - List of all deliverables
 - Resource requirements phasing plan
 - State government funding
 - Commercial partner investments (if any)
 - Federal government partnership description (if any)
 - Other COE partnership description (if any)
 - Intellectual property management plan
 - Plan for managing the COE and need (if any) for resources to develop and maintain the logistics and administrative aspects of the COE
 - Identified commercialization opportunities
 - Sector of economy for opportunity (i.e. aerospace, advanced energy, automotive)
 - Commercialization partner(s) including cost sharing in technology development



- Do the proposed projects of the COE meet the applications/user driven requirements derived from emerging mission focus areas of NASA and DOD? Does the project have a government sponsor at one of the national labs? Each project needs to identify their sponsor by name and organization and provide their contact information. <u>This is a go/no go for each project.</u>
 - The appropriate Federal laboratory will provide the evaluation and feedback as to whether or not the criteria has been met.
- 2. The number of jobs the project will create (12 months, 24 months, and 36 months respectively). If there is no industry cost share, then the long-term impact to Ohio industry should be considered. What industry/government contracts will subject matter experts, new capability or capacity potentially support? What is the proposed projects degree of alignment with Ohio industries and its potential to impact job creation? Cost share from industry partners would be a measure of alignment. This is a go/no go for each project.
- 3. The FRN will utilize best practices adopted by JobsOhio and affiliated regional economic development organizations in the state to evaluate this criteria based on validated data provided by participating companies and organization through the COE's.
- 4. What is the proposed level of collaboration between the university partners? Is the project a collection of independent sub-projects or is it truly an integrated approach to meeting a technical objective of a federal agency or company?
- 5. As the state funds are an investment intended to attract additional federal, foundation or industry funding what are some of the key procurement targets each project has to secure additional funding? Targets should be called out by name and agency/organization. How does the project improve the long-term competitiveness of Ohio's universities, federal labs or industries?

COI for FRN



- The FRN will maintain the highest level of integrity and each non-government member of the FRN Executive Review Committee and Technical Review Committee will be asked to signed a COI Statement (See attached).
- It will be the policy of the FRN that no member of the ERC and TRC will be disqualified from dealing with the financial transactions of the FRN provided the interested party does not participate in or vote at any meetings of the FRN which authorizes the financial arrangement
- The ERC and TRC members will be obligated to disclose their financial interests to the Chairs of the respective committees
- The policy in effect applies to the industry, association, and university participants on the ERC and TRC
- State and Federal Government Officials are exempted

Schedule and Go Forward Plans Near-Term and Longer-Term



- Aug 20th COE Leads Follow-up Meeting
- Aug 21st Telecon with all Universities.
- Sept 30^{th -} Technical COE White Papers due to Chapter 1 Team.
- Oct 15th COE White Paper Review and feedback by Team
- Nov 30th COE Detailed Proposals Due
- Dec 15th ERB and TRC review complete on Detailed Proposals
- Jan 1 Round 1 Phase 1 Funding



Event

FRN Timetable – 2015-17

Date

•	August 31, 2015	Announcement of FRN COE Call for White Papers
•	September 30, 2015	Round 1 FRN COE White Papers Due
•	October 1-15, 2015	Round 1 White Paper Review by FRN Executive Team
	Week of October 12, 2015	Round 1 and 2 COE Lead Meeting in preparation of RFP Process
•	October 15, 2015	Round 1 Invitation to Submit White Papers
•	November 30, 2015	Round 1 COE RFP Response Deadline for Funding Business Plan Proposals
•	December 1-31, 2015	Round 1 RFP Review by TRC and ERB
•	December 2015	Round 1 Award Approval from OFMJC Commision
•	January 7, 2016	Round 1 Notification of RFP Selection COE Awards
•	January 15, 2016	Round 1 COE Funding Release Phase 1.
•	-	-
•	January 30, 2016	Round 2 FRN COE White Papers Due
•	February 1-15, 2016	Round 2 White Paper Review by FRN Executive Team
•	Week of February 12, 2012	Round 2 COE Lead Meeting in preparation of RFP Process
•	February 15, 2016	Round 2 invitation to Submit White Papers
•	March 30, 2016	Round 2 COE RFP Response Deadline for Funding Business Plan Proposals
•	April 1-31, 2016	Round 2 RFP Review by TRC and ERB
•	May 1, 2016	Round 2 Notification of RFP Selection COE Awards
•	Mary 15, 2016	Round 2 COE Funding Release Phase I
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•	April 15, 2016	Round 1 COE Quarterly Review with FRN Leadership Team
•	July 15, 2016	Round 1 and 2 COE Quarterly Review
•	October 15, 2016	Round 1 and 2 COE Funding Release Phase II
•	January 15, 2017	Round 1 and 2 COE Annual Review
•	April 15, 2017	Round 1 and 2 COE Quarterly Review with FRN Leadership Team
•	July 15, 2017	Round 1 and 2 COE Quarterly Review
	October 15, 2017	Round 1 and 2 COE Funding Released Phase III

Requested FMJC Actions



The FRN Leadership Team requests that the FMJC take the following actions:

- Approve Budget Allocations for FRN Network
- Approve Organizations Construct to Support FRN
- Approve Charters for ERB and TRC
- Approve Proposed ERB and TRC Participants
- Approve White Paper Review Team and Process
- Approve Proposed COI for FRN
- Approve Overall Schedule and Plans Going Forwards
- Approve Recommendations of White Paper Review Teams at Oct 8 FMJC Meeting



Back Up Slides



Strategy and Prioritization meeting Held on Feb 5

Reviewed and Refined FMJC Research Priorities

• AFRL Priorities

- Human Performance/ Health Sciences
- Hypersonics
- Directed Energy Weapons (Lasers)
- Autonomy
- C4ISR
- LVC
- Materials/ Manufacturing
- Propulsion

NASA Glenn Priorities

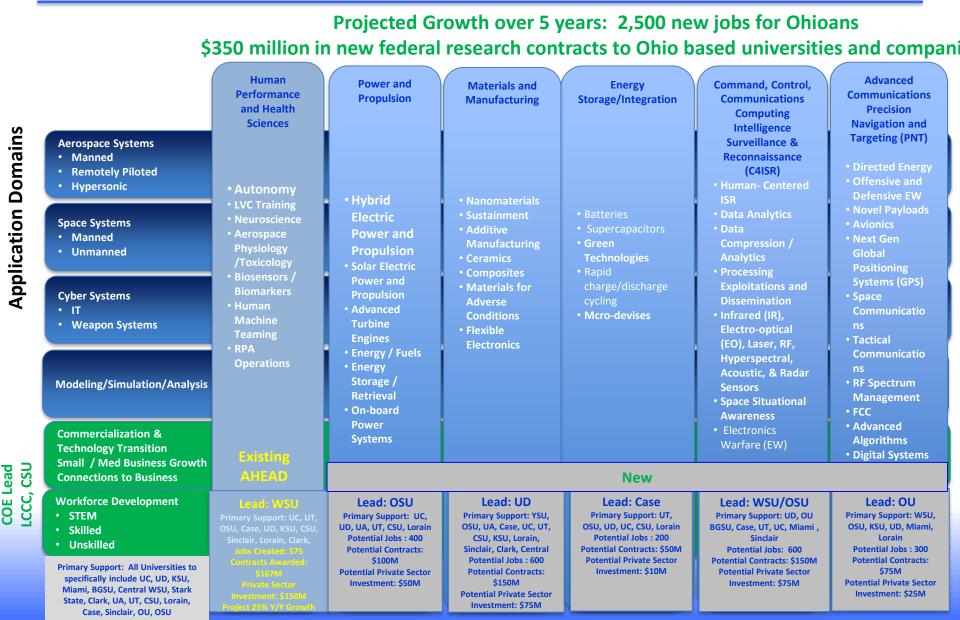
- Hybrid Electric Propulsion
- Advanced Communications
- Solar Electric Propulsion
- Energy Storage (Enabler for others)
- Materials and Manufacturing

NASIC Priorities

- Cyber
- Data analytics
- C4ISR
- Modeling/Simulation/Analysis
- Hypersonics
- Directed Energy



WPAFB / GRC Mission Applications Driven Centers of Excellence (COEs)





COE Leads

Human Performance and Health Sciences

Tim Broderick – Wright State University <u>timothy.broderick@wright.edu</u> Aaron Miller- Wright State University- <u>aaron.miller@wright.edu</u>

C4ISR

Colin Morrow- Wright State University- <u>colin.morrow@wright.edu</u> Greg Creech- Ohio State University- <u>creech.41@osu.edu</u>

Power & Propulsion

Meyer Benzakein- Ohio State University- benzakein.2@osu.edu

Energy Storage/Integration

Alexis Abramson- Case Western Reserve University- <u>alexis.abramson@case.edu</u> Anne Borchert- Case Western Reserve University- <u>amb14@case.edu</u>

Advanced Communications PNT and EW

Trent Skidmore- Ohio University- <u>skidmort@ohio.edu</u> Shawn Osterman- Ohio University- <u>osterman@ohio.edu</u>

Materials & Manufacturing

Steve Szaruga- University of Dayton- <u>Stephen.Szaruga@udri.udayton.edu</u> John Leland- University of Dayton <u>John.Leland@udri.udayton.edu</u>

Commercialization & Workforce Development

Tracy Green- Lorain County Community College- <u>tagreen@lorainccc.edu</u> Jerzy Sawicki- Cleveland State University- <u>jsawicki@csuohio.edu</u> Susan Barnes- Cleveland State University- <u>s.f.barnes@csuohio.edu</u>

Chapter 1 Leads.

Marty Kress- Ohio State University- <u>kress.83@osu.edu</u> Christopher Ristich- AFRL- <u>christopher.ristich@us.af.mil</u> Robert (Joe) Shaw- NASA Glenn Research Center- <u>robert.j.shaw@nasa.gov</u> Curt Rowland – NASIC <u>curtis.rowland@us.af.mil</u> Dennis Andersh WSU <u>dennis.Andersh@wright.edu</u> Erin Holden WSU <u>erin.holden@wright.edu</u> Oversees the SharePoint and maintains a central Contact Database for everyone.



To access this portion of the site, navigate to: <u>http://ofmjc.atichcd.org</u>

At the top of the page, there will be a site password of "OHFRN7"

Once you enter the documents page, any documents on the Center of Excellence section will require a username and password.

Your username will be your first initial last name followed by @ofmjc.atichcd.org

Your initial password will be your last name followed by "2015Jobs!"

Example for Jane Doe:

Username: <u>jdoe@ofmjc.atichcd.org</u> Password: Doe2015Jobs! - this portion **is case sensitive.** You will also be prompted to change your password at this point.

Once you have signed in, you will be able to access the COE portion of the OFMJC site. Each COE has a web-page assigned to it.

From the landing page of each COE, you can view, download and open documents. If you would like to upload or edit a document, please select the Open link, for example "Open Human Performance/Health Science folder" and you will be taken to the directory for that COE.

Please email Erin Holden at erin.holden@wright.edu for questions