

Recommended Next Steps for WSRI/ WSARC to Address Faculty Senate Resolution.

This document is feedback to the Faculty Senate to specifically address the OIG findings and recommendations as well as address the items raised through the Faculty Senate draft resolution on January 22, 2018. Starting on page 2 we address each of the concerns raised by the Faculty Senate.

The recommended next steps and timelines are summarized below and are detailed in Attachments A - C. The next steps are:

1. Implement the WSRI Research Advisory Council (RAC) and Executive Advisory Council (EAC) by March 30, 2018. See Attachment A for EAC and RAC Details.
2. Use the WSRI Research Advisory Council to review and recommend FY19 WSRI Goals, Objectives and Metrics for Success. Focus will be on Faculty and Student involvement in WSRI research activities. The FY18 WSRI and WSARC goals and objectives are provided in Attachment B. Objective is to complete FY19 Goals and Objectives by 1 June 2018.
3. Use the Executive Advisory Council to quarterly review WSRI research and the WSARC operational performance. Complete 1st review by 30 March 2018.
4. Implement New WSRI/WSARC Independent Research and Development (IRAD) program in March 2018. See Attachment C for Details.
5. Re-Establish Monthly Opportunity Reviews for Impending State and Federal Research grants and contracts. Hold first meeting by March 21, 2108 and monthly thereafter.
6. Provide briefings to Deans, Chairs and Faculty as desired to openly discuss WSRI/WSARC's past, present state, and our new way forward. Complete as needed.
7. The Faculty Senate would re-evaluate the objectives and shared metrics on each of these steps identified above. Complete by January 2019.

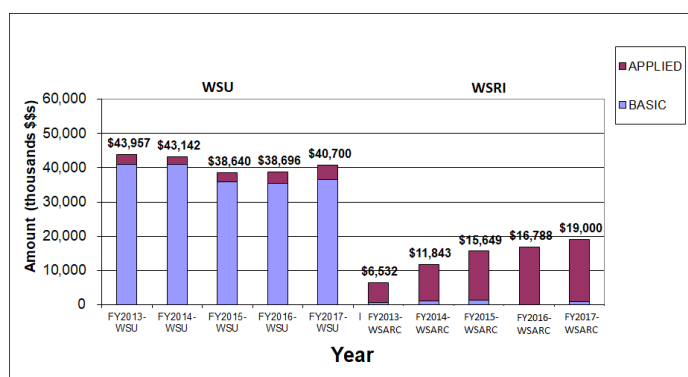
What are the benefits of WSRI and WSARC for WSU?

As a department of Wright State University (WSU), the Wright State Research Institute (WSRI) is dedicated to WSU's mission to transform the lives of students and the communities we serve, and to support that mission by working with faculty, staff, students and external partners to enhance the research enterprise at WSU. WSRI and the Wright State Applied Research Corporation (WSARC) are modeled after the national best practice of the Georgia Tech Research Institute (GTRI) and the Georgia Tech Applied Research Corporation (GTARC).

As a result, WSRI and WSU combine the best of both applied and basic research to solve the innovation equation on behalf of clients. This combination provides unsurpassed expertise, technical solutions, and new levels of capability for our armed forces, our federal and state sponsors, our industry partners, and those with whom we collaborate worldwide. WSRI works with faculty and other campus units to catalyze strategic research and scholarly activities that lead to innovation and problem-solving and address critical challenges facing the nation.

WSU can recognize and fully count the WSARC research staff in WSU's total research portfolio. Counting WSARC's contribution is critical to the Higher Education Research and Development (HERD) surveys. If the WSRI post-doctoral fellows and researchers had been included in the 2015 HERD survey (along with other omitted WSU researchers), WSU would likely have retained an R2 (Research 2) research ranking in the Carnegie Classification of Institutions of Higher Education. Adding WSARC's research funding and research staff to WSU's future survey data will greatly enhance WSU's ability to re-attain an R2 ranking and then potentially transition to an R1 (the highest ranking of Research 1) ranking in the future.

The graph below clearly shows the distinct difference between WSU basic research and WSRI applied research. Data over the past five years show that research growth has occurred at WSRI while University research funding has remained relatively flat.



Growing applied research directly supports the growth of the WSU basic research portfolio as is illustrated below by the number of WSU faculty partners doing basic research for WSRI awards.

Current Contracts	Sponsor	Faculty	Duration (in years)
Precision High-Intensity Training through Epigenetics (PHITE)	ONR-MURI	Kadakia, Markey, Craig, Raymer	5
Human Performance and Health Sciences COE (HPS-COE)	OFRN	Wischgoll, Raymer, Doran, Hitzler, Ganapathy	2
Mission-Directed Learning Environment (MIDLE)	AFRL	Ganapathy	2
Calamityville Operational Test Range	AFRL	Raymer	1.5
Advanced Cadaveric Training with Operational Realism (ACTOR)	AFSOC	Guthrie	3
Hybrid Forecasting Competition (HFC)	IARPA	Juvina, Ganapathy	4
Lapses of Attention Predicted in Semi-structured Ecological Settings (LAPSES)	ONR	Juvina, Harel	3
Maximizing the Collective Intelligence of a Network Using Novel Measures of Socio-Cognitive Diversity	ARO	Sheth, Shalin	3
Integrated Sense, Assess and Augment (ISAA)	AFRL	Elbasiouny	2
ACE-EM	AFRL	Sharma, Barton	1
Pending Opportunities			
Goal-driven Agile Teams and Environments (GATE)	DARPA	Juvina	1

For example in 2016, the Office of Naval Research (ONR) named WSU as the lead for its \$7.5M Precision High Intensity Training through Epigenetics Multidisciplinary University Research Initiative. This is unprecedented in that R1 institutions normally win these awards (other winners are all R1 Universities). WSRI prepared the MURI proposal in collaboration with the WSU Boonshoft School of Medicine (BSOM) and College of Engineering and Computer Science (CECS). After the MURI award, WSRI received no funding and all funding was provided to the BSOM, CECS, and the rest of the MURI teammates. Just as importantly, these wins improve the attraction of high quality students and world-class faculty researchers to the University.

WSRI, in conjunction with WSU in this past fiscal year, submitted \$79M in new proposals and won \$35.6M. For FY18, as of January 1, 2018, WSRI working collaboratively with WSU faculty have won \$10.8M of new awards. These awards are from AFRL, AFOSR, DARPA, IARPA, SOCOM, ONR, and ARO, many of which are new clients for WSU as a prime contractor.

Over the past six years, WSRI has employed approximately 186 WSU students to support our customers in industry and in internal projects and programs all while enhancing WSU academic programs and providing unique hands-on learning opportunities. Ten WSU students have been hired as full time employees at WSRI upon graduation. Additionally, WSRI has employed a total of 484 students to support multiple WSU programs from 2010 to 2017.

In summary, as a 501(c)(3) Corporation, WSARC has a separate governing Board of Directors and follows the Office of Management and Budget (OMB), Uniform Guidance Super Circular OMB Circular (2 CFR Part 230 Cost Principles for Non-Profit Organizations; formerly OMB Circular A-122) and the University follows the Uniform Guidance Super Circular OMB Circular (2 CFR-200; formerly A-21). The different financial and operational regulations result in different indirect rates and cost structures. The WSARC can recover its actual cost of operation through overhead (OH) and general administration (G&A). In contrast, WSU facilities and administration (F&A) rates are fixed by the cognizant agency every 3 years. For example, the current WSU on-campus negotiated indirect cost (F/A) rate is 50%, whereas the actual rate is closer to ~62%. In short, WSU grants are not recovering their true total costs. This discrepancy frequently leads people to believe that WSARC is more “expensive” than WSU. On the surface, this might be true; however, the major difference is because WSARC charges actual rates and the WSU grants and contracts are subsidized by other University resources.

OIG RECOMMENDATIONS AND WSU/WSARC RESPONSE

1. Consider implementing an affiliation agreement between the University and WSRI and/or WSARC to better establish a demarcation in finances, duties and responsibilities.

This recommendation was in fact already completed on October 23, 2017, when WSU and WSARC approved and executed an affiliation agreement that formally established the relationships between WSU and WSARC.

This agreement clearly states WSU's expectations of WSARC as well as the roles and responsibilities. It states that WSARC supports the WSU research enterprise primarily by acting as a contracting entity for WSU, WSRI, and the State of Ohio and it provides supplemental operational mechanisms necessary to fulfill the mission and vision directives of the University and its constituent units, and does so as a benefit to the University. It also states that WSARC is a separate 501(c)(3), has a separate governing Board of Directors and follows the Office of Management and Budget (OMB), Uniform Guidance Super Circular OMB Circular (2 CFR Part 230 Cost Principles for Non-Profit Organizations; formerly OMB Circular A-122) which are different than those followed by public universities like WSU.

Article I of the Agreement details WSARC's governance and the role WSU plays. It states that WSARC must at all times have more independent board members than those who are connected or related to WSU.

Article II details the financial relationship and clearly states that WSARC is fully responsible for its own funding, and that WSU has no obligation to contribute funds to WSARC, even though WSARC is considered a "component unit" for tax and audit purposes. This section also dictates that WSARC owns and operates its own financial management systems. In addition, this section states that transactions occurring between WSARC and the University are subject to appropriate review and approvals.

Articles III through VIII detail the responsibilities, human resources, and standard operating procedures so that each area is carefully and clearly defined for both WSARC and WSU.

The affiliation agreement and the related standard operating procedures were developed in collaboration with multiple WSU representatives starting in September 2015 and were completed in 2016.

2. Consider establishing independent leadership and financial accounting for affiliated entities such as WSARC, creating a wall between the university and the affiliated entity.

With the implementation of the requirements of the Affiliation Agreement, this work has been completed and will be fully operational by July 1, 2018.

As required by the Affiliation Agreement, WSARC must at all times have more independent board members than those who are connected or related to WSU. In the WSARC Code of Regulations adopted by its Board of Directors, the WSARC Board will consist of the following:

- The President of WSU or his/ her designee
- Two individuals appointed by the President of WSU (University Directors)
- A representative of the WSU Board of Trustees appointed by the Chair of that Board
- A maximum of nine elected Directors who are independent and unrelated to WSU.

WSARC has always had its own contracting and finance departments outside of WSU, from its inception in March 2011. WSARC has always had its own bank accounts for all activities. The Affiliation Agreement clearly states that WSARC is fully responsible for its own funding and that WSU has no obligation to contribute funds to WSARC, even though WSARC is considered a "component unit" for tax and audit purposes.

Confusion exists as to contracting support because WSRI has used both WSU and WSARC contracts and finance offices for different contracts, based on the contracting support required or desired. Contrary to the OIG Report, WSARC's finance office was used for all WSARC-related invoices that were sent to WSARC and those invoices were paid for by WSARC, not WSU.

Today, WSARC solely manages 90 to 95% of the WSRI contracts and finances. The plan calls for WSARC to manage and support 100% of all WSRI contracts by July 1, 2018, which will provide complete independence of WSARC from WSU. There are a few current WSRI contracts, which cannot be moved because the clients do not support moving them from WSU to the WSARC for efficiency reasons. These contracts are ending soon and have limited remaining funds.

Additionally, prior to the reorganization of WSRI in September 2015, WSRI and WSARC had a bifurcated leadership structure reporting through the Provost's Office and the WSARC board. With the reorganization, the WSRI/WSARC leadership was consolidated into one position reporting to the WSARC board and the WSU Vice President for Research. After the reorganization, the joint staffs immediately set about consolidation of functions to ensure 100% compliance with University Policy. Additionally, a system of checks and balances were put in place, along with the development of joint set of standard operating procedures.

Again, as of October 23, 2017, WSU and WSARC entered into a memorandum of agreement for operation of WSARC, formalizing WSARC as an affiliated entity of WSU. As part of the plan, movement of all WSRI contracts to WSARC will be completed by July 1, 2018 thereby finalizing complete independence in all activities (a "firewall") between WSU and WSARC for WSRI.

3. Consider staffing affiliated entities with their own staff instead of allowing university employees to staff independent affiliated entities.

Wright State has adopted employment practices for research institutes in line with national best practices.

In particular, the Wright State Applied Research Corporation (WSARC) operates as an affiliated entity modeled after the national best practice at the Georgia Tech Applied Research Corporation (GTARC) of the Georgia Tech Research Institute (GTRI).

The GTARC model that was used as the model for WSARC also does not have any employees, although the GTARC and GTRI employees are all Georgia Tech employees. This type of Applied Research Corporation model is a common practice at many top universities in the country. The benchmark example is GTARC <http://www.gtarc.gatech.edu/>, the contracting arm for GTRI, <https://www.gtri.gatech.edu/>.

Following the same model as GTRI, The Wright State Research Institute (WSRI) is a department of Wright State University that reports through the Vice President of Research.

WSARC does not have employees. All work done for WSARC is completed by WSU employees and the University is reimbursed for their salaries. The staff supporting the WSARC provide contract, finance, security, IT and export control and are independent of the WSU staff providing similar functions on campus.

As a 501(c)(3) Corporation, WSARC has a separate governing Board of Directors and follows the Office of Management and Budget (OMB), Uniform Guidance Super Circular OMB Circular (2 CFR Part 230 Cost Principles for Non-Profit Organizations; formerly OMB Circular A-122) which are different than those followed by public universities like WSU. In addition, WSARC's operating procedures now require that all research grants/projects, that involve WSU faculty, are sub-contracted/sub-awarded to WSU. This allows the faculty to receive the appropriate research credit, preserves the financial firewall and facilitates Wright State University's ability to recover the approved indirect F&A rates for those efforts.

As previously stated, as part of the Affiliation Agreement and implementation plans, the movement of all WSRI contracts to WSARC will be completed by July 1, 2018 thereby finalizing complete independence in all WSRI activities (a "firewall") between WSU and WSARC.

Article IV of the approved Affiliation Agreement requires that all WSARC operations will be done by WSU employees. WSARC will reimburse WSU for all compensation related expenses (including paid time off) of WSU employees engaged as direct labor or included in indirect activities undertaken for WSARC.

4. Consider hiring outside legal counsel to represent affiliated entities to offer independent advice on contract terms, instead of using University counsel.

This recommendation was already adopted, in September 2015.

In September 2015, in consultation with the Ohio Attorney General's office and the WSU General Counsel, WSARC hired the law firm of Taft Stettinius & Hollister, LLP as WSARC's independent legal counsel. Since that time, Taft has handled all WSARC legal and contract review and coordinates with the WSU General Counsel only as required.

Taft's Government Contracts team has over 50 years of experience working with companies to ensure that the companies comply with federal and state and local government's requirements and ensure that companies comply with a myriad of social, economic and environmental requirements well beyond those in any commercial or other private sector contract. Taft has extensive experience and ensures that businesses comply with a separate set of rules (Contract Cost Principles and Procedures) that differ from generally accepted accounting principles. Taft also has extensive experience in analyzing existing systems to ensure compliance, helping contractors institute or re-structure compliance programs and, when non-compliances occur, helping to disclose them effectively.

ATTACHMENT A

WRIGHT STATE RESEARCH INSTITUTE EXECUTIVE ADVISORY COUNCIL

Statement of Purpose

1. The Wright State Research Institute (WSRI) Executive Advisory Council (“EAC”) works with the Executive Director of WSRI to provide ongoing oversight of and provide input for the business and research activities of WSRI, and the WSRI Research Advisory Council (RAC). The particular areas of the EAC’s focus include; 1. Ensuring there is continuous focus and improvement in the working relationships between WSRI and the WSU Research Enterprise (RE) including review of business performance and processes; 2. Aligning WSRI and WSU RE efforts to become a world class research capability, with innovative ways of capturing research opportunities that meet the shared mission and are in full compliance with applicable state and federal regulations; 3. Helping to share and providing a consistent message in communicating with customers, particularly the government research mission at Wright Patterson Air Force Base (WPAFB), other stakeholders across Ohio, and the RE notably the faculty, staff and students of WSU; and 4) that WSRI is working within in accordance with the affiliation agreement between WSU and WSARC. The outcome is to guide and expand the role of the WSU and WSRI RE as a driver of economic development in the Dayton region and beyond.

(The WSU Research Enterprise is defined as the faculty and staff that support the increase of externally funded research, scholarly activities, and other sponsored programs.)

Organization

Composition

2. The Council will be comprised of up to 11 voting members who shall be:
 - WSU President
 - WSU Provost
 - WSRI Executive Director
 - WSU Vice President for Research
 - WSU Vice President for Finance and Operations and Chief Business Officer (Chair)
 - WSU Faculty Senate President
 - WSU Director of Compliance
 - WSU / WSARC Board Member
 - WSRI Chief Science Officer
 - WSU AVP Human Resources
 - WSU Chief Information Officer (CIO)
 - General Counsel’s Office (as required).

Meetings

1. The EAC will meet at least quarterly and meetings may be called by its Chair or any three (3) members of the EAC as required. It is anticipated that quarterly meetings will be the normal schedule in Year 1.
2. A majority of the voting members of the EAC will constitute a quorum if any vote is required.
3. A majority of the voting members in attendance will have authority to decide any question that is brought before any meeting of the EAC.

4. The EAC will keep minutes of its proceedings that will be signed by its Chair and the person whom the Chair designates to act as secretary of the meeting. The minutes of each meeting will be approved by the EAC at its following meeting and will be filed as permanent records of WSU and the WSRI.
5. The Chair will report at least annually on the substantial matters considered in any meeting to the WSU Board of Trustees as required.

Compensation

Members of the EAC will not receive any compensation.

Duties and Responsibilities

1. Promotes transparency.
2. Ensures compliance with University, state and federal regulations and policies.
3. Promotes collaborations across our University.
4. Engages and cultivates our people as our greatest asset.
5. Innovates across all technical, administrative and business divisions of the Institute.
6. Promotes integrity and stewardship to ensure that all personnel act ethically, at all times.
7. Ensures financial self-sufficiency.
8. Ensure affiliated Entity Compliance with Affiliated Entity Memorandum of Agreement (MOA).

The EAC is also responsible for ensuring the continuous improvement of WSRI, which includes two specific areas for regular review and assessment: WSRI's business priorities and associated processes and its financial performance to ensure continuing viability.

1. Business Priorities and Processes

- a) Reviewing the 5-year strategic plan and annual business plans
 - i. Maximize synergy with WSU's mission, strategic plan and development thrusts.
 - ii. Support the communication of these within WSU with faculty, staff and students.
- b) Reviewing the set of WSARC Standard Operating Procedures (SOP) that define how the various parties in WSU and WSRI work together.
 - i. Review the SOP on annual basis to ensure all elements are still applicable and effective.
 - ii. Review compliance to SOP and provide feedback.
 - iii. Identify and integrate policies and procedures for new emerging areas of concern such as cyber security.
- c) Fostering the development of common business processes and systems to facilitate interactions with the WSU and WSRI RE, avoiding duplication and leveraging tools such as workflow, document archiving, etc.

2. Financial Performance

- a) Simplifying inter-entity financial transactions through better communication of the Banner users and DELTEK Costpoint users for accounting and financial reporting.
- b) Managing inter-entity financial obligations through full documentation and transparency to keep all relevant accounts current on at least a monthly basis.
- c) Carrying out quarterly financial reviews, including all research backlog, pipeline and an outlook analysis for future business emphasis in compliance with the WSU and WSARC Affiliation Agreement.
- d) Coordinating annual federal audit efforts and other government reviews and reporting.
- e) Identifying the most effective means of acquiring and managing capital assets.

Alignment of Research Efforts and Compliance

The EAC is responsible for oversight of compliance within WSRI. This is an essential requirement to be a world-class research facility and to protect the interests of its customers and stakeholders. The goal is to ensure all activities are in full compliance with all Wright State University policies and procedures that apply to WSRI operations, including the following:

1. Adherence to all existing compliance policies and procedures as documented in the University Policy, the Administrative Policies and Procedures of Wright State University, and the WSRI SOP.
2. Periodic review of adequacy of existing compliance policies and procedures and development of new or amended policies or procedures to satisfying emerging compliance requirements.
3. Review of the additional compliance and security requirements for WSU and the WSARC including International Traffic in Arms Regulations (ITAR), Export Administration Regulation (EAR), Health Insurance Portability and Accountability Act (HIPAA), Federal Acquisition Regulation (FAR), Defense Federal Acquisition Regulation Supplement (DFARS), the operation of secure facilities, and compliance with National Industrial Security Program Operating Manual (NISPOM) and other specific regulations.
4. Maintaining the Affiliation Agreement to correctly reflect the basis on which WSU and WSARC work together. This may include making amendments to reflect policy and business changes by both parties, and the need to address emergent federal and state legislative and regulatory changes.

Communications Management

The EAC is responsible for monitoring and providing guidance on the communications about the WSRI to its customer and stakeholders and ensuring that it is consistent with the objectives and principles defined in the Affiliation Agreement between WSU and WSARC.

1. Convening of a joint meeting with WSU Board of Trustees on an annual basis to provide an update on past performance issues and concerns and future plans.
2. Providing the initial forum for conflict resolution between parties within the WSU and WSRI RE. Although the conflict resolution may be referred elsewhere, the EAC has the knowledge to do this effectively.

Current Draft EAC Composition.

Executive Advisory Council

Composition

The Council will be comprised of up to 11 voting members who shall be:

▪ WSU President:	Dr. Cheryl Schrader
▪ WSU Provost:	Dr. Thomas Sudkamp
▪ WSRI Executive Director:	Mr. Dennis Andersh
▪ WSU Vice President of Research:	Ms. Ellen Reinsch Frieze
▪ WSU Vice President for Finance and Operations and Chief Business Officer (Chair):	Mr. Walt Branson
▪ WSU Faculty Senate President:	Dr. Travis Doom
▪ WSU Director of Compliance:	Ms. Kelli Tittle
▪ WSU / WSARC Board Member:	Lt. Gen. (Ret) C.D. Moore
▪ WSRI Chief Science Officer:	Dr. Timothy Broderick
▪ AVP Human Resources:	Ms. Shari Mickey-Boggs
▪ WSU Chief Information Officer (CIO):	Mr. Craig Woolley
▪ General Counsel's Office (as required).	

CHARTER
WRIGHT STATE RESEARCH INSTITUTE
RESEARCH ADVISORY COUNCIL

Statement of Purpose

The Wright State Research Institute (WSRI) Research Advisory Council (RAC) operates in conjunction with the Executive Advisory Council (EAC). The RAC works with the WSRI Chief Science Officer and the WSRI Executive Director (ED) to formulate the WSRI focus with respect to the needs of the federal agencies, state organizations, and industry. In addition, the RAC will review and prioritize the pursuit of funding, the commercialization of developed technologies and the engagement of Wright State University (WSU) faculty, staff and students within the framework of the affiliation agreement between WSU and WSARC.

Organization

Composition

3. The RAC will operate and function as an independent advisory committee serving the needs of the WSU Research Enterprise (RE) by providing input and recommendations for WSRI research. The WSU Research Enterprise is defined as the faculty and staff that support the increase of externally funded research, scholarly activities, and other sponsored programs.
4. The Chief Science Officer of WSRI will chair the RAC and be responsible for organizing and reporting on the council's activities to the EAC.
5. Members
 - a. The RAC will be comprised of 17 members with the Chair, including
 - i. Chief Science Office, WSRI (Chair)
 - ii. WSU Vice President for Research
 - iii. Deans (3)
 - iv. Chairs (4; no more than 1 from each college)
 - v. Faculty (6; no more than 1 from each college)
 - vi. AFRL Chief Technology Office or their Designee
 - vii. NASIC Chief Scientist or their Designee
 - viii. NAMRU-D National Aerospace Medical Research Laboratory Director or their Designee
 - ix. NASA Glenn Chief Innovation Office or their Designee.
6. Qualifications
 - a. Members of the RAC are recognized thought leaders in the science and technology research that supports the research enterprise of WSU and WSRI. The members should have experience in the evaluation of the technical merit, commercialization potential, and research and development within the public and private sectors.
 - b. The RAC members should provide a national and global view of the key technological challenges and opportunities with WSU, WSRI, and key partners.
 - c. The RAC members will support the identification of research opportunities and ensure that the WSRI and WSU roadmaps for technology development are effectively aligned with the WPAFB, NASIC, NASA-Glenn, and NAMRU-D missions.

- d. The RAC member should be able to evaluate technology in terms of the potential return on investment for proposed research programs for the WSU RE as well as the State of Ohio, and Federal sponsors.
 - e. Members of the RAC should have a demonstrated background and the disciplinary balance across the RE to maximize the WSU and WSRI research foci and objectives.
 - f. Members should have a track record of striving to promote a culture of collaboration within and between the members of the WSU RE, private industry, institutions of higher education, and all federal research agencies and installations.
- 7. Appointment to the RAC
 - a. WSU Faculty Representatives will be jointly appointed by the Chief Science Officer and the Vice President for Research based on recommendations and input from WSU administrative leadership.
 - b. The respective organizational leaderships within the US Air Force, NAMRU-D and NASIC will approve the appointment of their representatives.
- 8. Term of service
 - a. The members of the RAC will serve for 2 years.
 - b. In the event a member resigns; a replacement will be appointed by the RAC Chair in conjunction with the EAC to serve the balance of the term.

Meetings

- 1. Frequency - The RAC will meet at least quarterly and hold such other meetings from time to time as may be called by its Chair or any three (3) members of the Council. It is anticipated that quarterly meetings will be the norm in Year 1 and may change to semi-annual after Year 2.
- 2. Quorum - A majority of the members of the RAC will constitute a quorum if there is any vote required to support the RAC objectives.
- 3. Voting - A majority of the members in attendance will have authority to decide any question that is brought before any meeting of the RAC.
- 4. Minutes - The RAC will keep minutes of its proceedings that will be signed by the Chair and the person whom the Chair designates to act as the secretary of the meeting. The minutes of each meeting will be approved by the RAC members at its following meeting and will be filed as permanent records with the EAC.
- 5. Annual Report - The Chair will provide an annual progress report to the EAC and as deemed necessary, specific supplementary reports on any substantial matters considered during a meeting of the RAC.

Compensation

Members of the RAC will not receive any compensation other than for approved reasonable travel expenses.

Duties and Responsibilities

The RAC would operate in conjunction with the EAC to advise the overall research direction of WSRI and ensure it continues to support the WSU RE. The RAC will advise in the prioritization of WSRI efforts and the pursuit of funding from other state and federal agencies, and the engagement of WSU faculty, staff and students within the framework of the affiliation agreement between WSU and WSARC. Specifically, the Duties and responsibilities of the RAC are:

- 1. Research Thrust Review and Advisory Support

2. Faculty and Student Engagement and Collaboration
3. Ad Hoc Technology Transfer Guidance
4. Ad Hoc Research Proposal Review

Research Thrust Review and Prioritization

The RAC will:

1. Ensure that the WSRI research agenda advances the state of the art; supports the federal and state priorities; aggressively pursues commercialization opportunities in Ohio, and, maximizes productivity through cross program and infrastructure leverage.
2. Review and recommend a WSRI technology framework establishing the context and focus of research programs, highlight relationships between them and map the research activities of the WSU RE to identify opportunities for synergy and collaboration.
3. Review and approve roadmaps for core RE technologies to support research thrusts and monitor their progress.
4. Review key funding opportunities for the RE research programs to ensure alignment with WSU and WSRI strategic goals and objectives.
5. Review and support Air Force, Navy, Army, Marine Corps, DARPA, IARPA, the Intel Community, NASA, and the related prioritization of research thrusts.

Faculty and Student Engagement and Collaboration

The RAC will:

1. Provide guidance regarding complementary roles within WSU and WSRI for basic and applied research activities, commercialization, and the realization of economic benefits.
2. Leverage collaboration and communication tools, to support the effective engagement of the WSU and WSRI researchers with complementary organizations and its state, federal and private sector partners.
3. Ensure the WSRI research strategic plan is collaborative and is measured through faculty and student feedback through the RAC members.
4. Review the work by WSRI Team members to establish common capabilities that support collaboration across the WSU RE and its public and private partners.

Establishing Research Standards

The RAC will

1. Ensure access to a world-class WSRI research infrastructure, integrating the skill and knowledge of faculty and staff with consultants regarding the operation of labs and other facilities.
2. Promote an environment that protects inventors and their intellectual property, and helps bring their technologies to market.
3. Provide guidance to ensure that a consistent and appropriate level of security and compliance is achieved by the RE internally and in all engagements with outside organizations.
4. Encourage the publishing of research results to maximize future funding and commercialization opportunities.

Enabling Technology Transfer

The RAC will:

1. Guide the development of an effective process to transfer the results of research programs to the commercial market place.

2. Evaluate the technical merit, broader applicability and commercialization potential for the technologies developed by RE research programs within both the public and private sectors.

Reviewing Research Proposals

Review proposals for technology investments to realize opportunities for synergy and leverage of technologies and other resources across the WSU RE.

The RAC's review and evaluation of proposals will for example use some of the following evaluation criteria:

(a) Potential contribution and relevance to WPAFB, NASIC, NAMRU-D, NASA and other federal agencies;

- The potential contributions of the proposed efforts are relevant to the enhancement of the national technology base. Specifically, the DOD's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming national security by sponsoring revolutionary, high-payoff research that bridges the gap between fundamental discoveries and their application. It is critical that DOD be able to transition this technology to the warfighter and to industry, particularly the high-tech community rapidly and economically. The RAC will review and assess the concept, development approach, and initial demonstration plan of proposers within the RE in the context of whether the proposed solution has a clear transition path into use, including the proposer's ability to implement the upgrades as needed on a continuing basis.

(b) Overall Scientific and Technical Merit;

- The proposed technical approach is innovative, feasible, achievable, complete, and supported by a detailed program plan and a proposed technical team that has the expertise and experience to accomplish the proposed tasks.

(c) Proposer's Capabilities and/or Related Experience;

- Prior experience in similar efforts clearly demonstrates an ability to deliver products that meet the proposed technical performance within the proposed budget and schedule. The proposed team has the expertise to manage the cost and schedule. Similar efforts completed/ongoing by the proposer in this area are fully described, including identification of other Government sponsors. This criterion will also consider the proposer's facility and personnel clearances to appropriately conduct mission level analyses.

(d) Technology Demonstration Plan;

- Demonstration Plan will be evaluated to assess the proposer's approach to developing an affordable technology demonstration system and risk reduction plan and achieving compelling and rapid capability demonstrations for transition. The degree to which the plan adequately retires high-risk elements from the development systems and has a clear path to integrate third party efforts will be evaluated.

(e) Cost Realism;

- The proposed costs are realistic for the technical management approach offered and demonstrate the proposer's practical understanding of the effort. The costs proposed are based on realistic assumptions, reflect a sufficient understanding of the technical goals and objectives of the research, and are consistent with the proposer's technical approach (to include the proposed Statement of Work and the level of completeness and details of the Basis of Estimate [BOE]).

Proposed RAC Composition.

Research Advisory Council

Composition:

The RAC will be comprised of XXX members with the Chair, including:

- Chief Science Office, WSRI (Chair):
- WSU Vice President of Research:
- Deans (3)
- Chairs (4; no more than 1 from each college):
- Faculty 5; no more than 1 from each college):
- AFRL Chief Technology Office or their Designee:
- NASIC Chief Scientist or their Designee:
- NAMRU-D National Aerospace Medical Research Laboratory Director or their Designee:
- NASA Glenn Chief Innovation Officer or their Designee:

Dr. Timothy Broderick
Ms. Ellen Reinsch Friese
Dr. Joseph Keferl
Dean Education & Human Services
Dr. Nathan Klingbeil
Dean Engineering & Computer Science
Dr. Doug Leaman
Dean Science & Mathematics
Dr. Jason Deibel
COSM Chair of Physics
Dr. Madhavi Kadakia
BSOM Chair Biochemistry & Molecular Biology
Dr. Shu Schiller
RSCOB Chair Information Systems & Supply Chain Management
Dr. Jaime E Ramirez-Vick
CECS Chair Biomedical, Industrial & Human Factors Engineering
Dr. Valerie Stoker
COLA Master of Humanities Program
Dr. Jeremy Schumm
School of Professional Psychology
Dr. Sherry Farra
College of Nursing and Health
TBD
TBD
Dr. Morley Stone
Mr. Curt Rowland
Dr. Richard Arnold
Dr. John Sankovic

ATTACHMENT B

**WRIGHT STATE RESEARCH INSTITUTE (WSRI)
&
WRIGHT STATE APPLIED RESEARCH CORPORATION (WSARC)
STRATEGIC PLAN
FISCAL YEAR 2018**

June 14, 2017

Dennis Andersh

Wright State Research Institute

WSRI Vision:

To be National leaders in transformational applied research activity.

WSRI Mission:

The mission of WSRI is to help Wright State University deliver high-impact solutions for government, industry and healthcare sponsors through research, education and training. WSRI will work with faculty and other campus units to catalyze strategic research and scholarly activities that lead to innovation and problem-solving to address critical challenges facing the nation. WSRI will expand the local talent pool to address the applied research challenges faced by industry, government, and the university. The Institute will enhance commercialization programs at the university, support economic development throughout the region and state, improve human performance research regionally, and be a reliable and productive partner of key government and industry research sponsors.

Guiding Principles:

As part of Wright State University, WSRI is committed to support WSU's mission to transform the lives of students and the communities we serve. The Institute will support that mission by working collaboratively with faculty, staff, students and external partners to enhance the research enterprise at WSU.

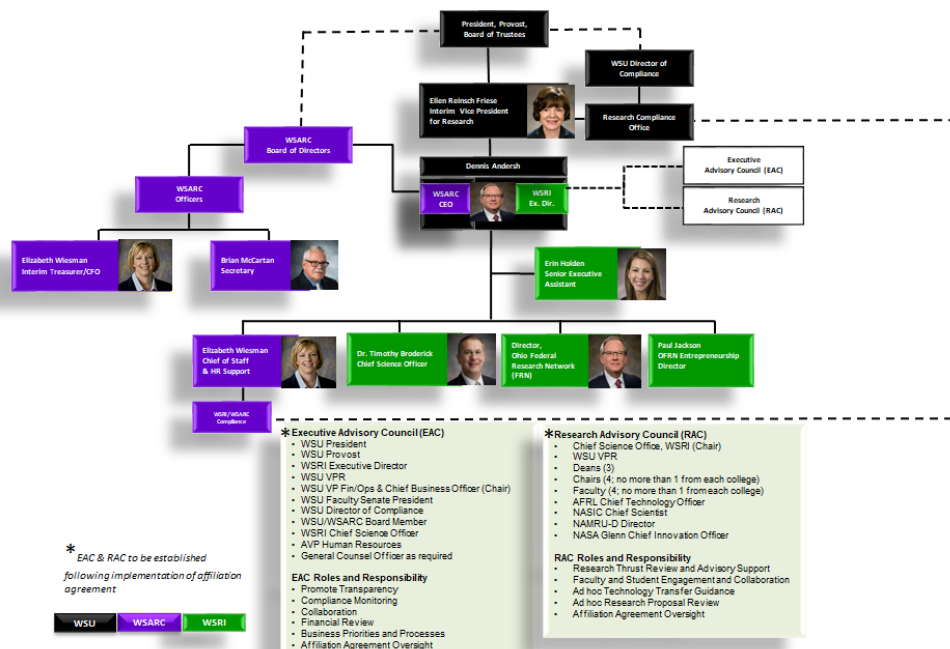
WSARC will support WSRI, the university research enterprise, and the State of Ohio by providing specialized contracting, compliance, and other support and applied research services that include business development, total cost accounting and recovery, Federal Acquisition Regulations (FAR)-based contracting support, security support for classified contracts, classified facilities and laboratories, and special facilities compliant with ITAR to support ITAR performance-based contracts.

All WSRI and WSARC activities will be performed in a manner that:

- Promotes transparency
- Ensures compliance with University, State and Federal regulations and policies
- Promotes collaborations across our University
- Engages and cultivates our people as our greatest asset
- Innovates across all technical, administrative and business divisions of the Institute
- Promotes integrity and stewardship to ensure that all personnel act ethically at all times
- Ensures financial self-sufficiency

Organization

WSRI currently has 96 Staff Employees (including 19 PhD qualified researchers), and 36 Student Employees. All WSARC functions are performed by WSRI employees. WSRI is tightly aligned with and integrated into the University to ensure rigorous oversight and is illustrated below.



Strategic Goal (Administrative):

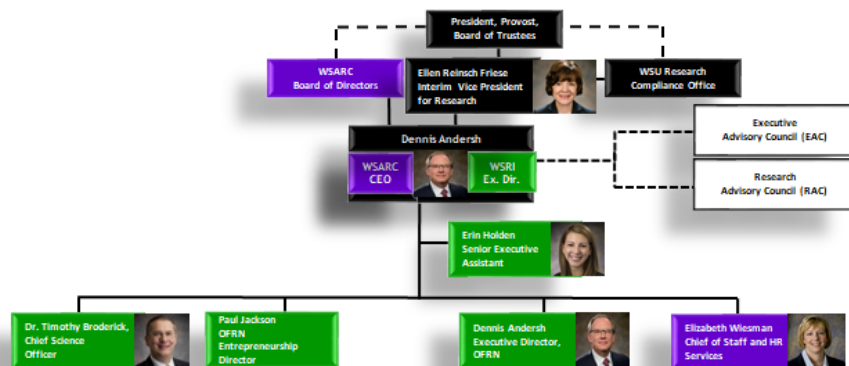
1. Creation of an Executive Advisory Council (EAC) and the Research Advisory council (RAC) comprised of WSU and WSRI faculty, staff and administrators.

- This goal is to be implemented after the Affiliation Agreement between WSU and WSARC is finalized and approved.
- The EAC and RAC will assist the WSARC CEO/WSRI Director to assess the overall research directions of the WSU research enterprise and the part WSRI plays in supporting these directions and meeting its own Mission and Vision goals.
- The EAC and RAC will assist with prioritization of WSRI efforts with respect to the needs of the US Air Force and other federal agencies, the pursuit of funding from other state and federal agencies, the commercialization of developed technologies and the engagement of WSU faculty, staff and students within the Institute's operational framework.

[Note: WSARC Board sub-committees have additional responsibility for audits and compliance monitoring, financial review, business priorities and processes, and oversight of the Affiliation Agreement.]

OPERATIONAL STRATEGY and GOALS

All operational goals and objectives for FY 18 are aligned with the organizational structure of WSRI and WSARC.



GOAL 1:
Accelerate basic scientific research into innovative solutions that address critical challenges

GOAL 2:
Enhance commercialization programs to expand University research.

GOAL 4:
Act in the best interest providing contracting services to federal and state research programs at Wright State University, Wright State Research Institute, and related entities.

GOAL 1

WSRI Chief Science Officer

GOAL 1: Accelerate basic scientific research into innovative solutions that address critical challenges.

Objective 1: Collaborate to advance scientific discovery and national security capability.

Objective 2: Protect, restore, and augment human health and performance.

Objective 3: Promote recognition of Wright State research and researchers.

Objective 4: Deliver high impact research results to clients and sponsors.

Business Plan Objectives:

Grow AFRL business by more than 15% in FY18.

Grow DARPA/ONR/IARPA/OSD/NAMRU/NASA by more than 20% in FY18 (\$5M a year is base from FY17).

Grow Industry Sponsored Research to achieve a funding level of at least \$1M per year including SBIR and STTR Funding (\$0.6 M is base for FY17).

Grow WSU Faculty Sponsored Research by 15% (Base is currently \$1M per year).

GOAL 2

WSRI Director of Commercialization

GOAL 2: Enhance commercialization programs to expand University research.

Objective 1: Target unmet commercial needs with disruptive, protectable concepts and technologies.

Objective 2: Develop multi-tiered funding sources to support promising commercializable concepts and technologies at Wright State.

Objective 3: Collaborate to enhance the regional commercialization ecosystem.

Objective 4: Establish a mentor/partnership with WSU faculty to establish pathways to identify and support faculty commercializable research.

Business Plan Objectives:

Launch at least two new startup companies based on University concepts and technologies addressing unmet commercial needs.

Develop at least \$1M in multi-tiered funding sources to support promising commercializable concepts and technologies.

Generate sustainable funding sources as follow-on to the DOD OEA grant to support the regional commercialization ecosystem.

Establish pathways to identify and support WSRI and faculty commercializable research and secure at least 2 funded I-Corps Teams (NSF, Ohio, OFRN...).

Establish or partner on Entrepreneurial Competitions for faculty and Students, using AFRL and community judges, leveraging VC/Seed sponsorship and invitee lists.

Provide tailored entrepreneurial training, mentoring programs, and partnerships to support University researchers.

Implement recommendations from the 2017 VPR&GS 360 review.

GOAL 3

WSARC CEO and OFRN Executive Director

GOAL 3: Provide a Responsive, Customer-Focused, Compliant, and Transparent R for D Process as the Ohio Federal Research Network Executive Agent.

Objective 1: Facilitate University and Industry Collaborations in support of the research requirements of key Federal Entities located across Ohio.

- *Create Integrated Challenge Problems with regional and national focus with matching funds from regional and national sponsors.*
- *Develop Project, Contracting and Technical Management leadership for All OFRN funded projects and challenge grant projects.*
- *Tie into Regional commercialization ecosystems where possible.*

Objective 2: Establish Aggressive Business Development model wherein OFRN supports enhancing the procurement skills of university researchers as well as takes the lead for initiatives that integrate key players across the state, regional and nation.

- *Establish pathways to identify and support Statewide Industry Sponsored research and to secure access to key university assets.*

Objective 3: Foster and promote systems of systems engineering educational and research opportunities for students and faculty alike – skill sets that will make our college graduates more work place ready and in turn strengthen our state’s national competitiveness.

Objective 4: Take the lead in working to gain recognition for OFRN as a key requirements-driven, solutions-oriented partner for the US Government.

- *For example: UARC, MSERC, S&T Center, MSERC, etc.*

Business Plan Objectives:

- Secure State Funding for the Ohio FY18-19 Operational Budget ~\$7M.
- Secure Federal Matching Funding for the FY-18 Defense Budget ~\$10M.
- Provide agile and responsive services in support of the OFRN and related entities.
- Create Integrated Challenge Problems with National focus with at least 1 to 1 matching funds from National Sponsors.
- Develop partnerships with Ohio businesses to increase the federally sponsored research programs statewide to include but not limited to IRAD, SBIRs, STTRs, and Federal RFPs, BAAs and Grants.
- OFRN win at least \$75M (Total funding) of New Awards Statewide.

GOAL 4

Chief of Staff and HR Services, and the WSRI Executive Director and WSARC CEO

GOAL 4: Act in the best interest providing contracting services to federal and state research programs at Wright State University, Wright State Research Institute, and related entities.

Objective 1: Provide support for the completion of a broad range of federal, state, and industry grants and contracts.

Objective 2: Ensure that the research enterprise of Wright State University is based on research performed by faculty, staff, and students from all of WSU's academic and research units, colleges, and schools.

- *Establish pathways to meet and discuss research focus areas and opportunities with Faculty, Staff and Students.*

Objective 3: Provide applied research services to the University and Research Institute that include business development, cost recovery and accounting, adherence to Federal Acquisition Regulations support for large contracts, security support, and compliance to ITAR-performance based contracts.

Objective 4: Accurately document the nature and scope of the affiliation between Wright State University and the Wright State Applied Research Corporation.

Business Plan Objectives:

- The Affiliation Agreement and related Standard Operating Procedures are critical and will be a focus to complete no later than the end of Q2.
- Budget plan execution for FY18 will be overseen by the WSARC Board Finance Committee is a must.
 - Must meet Client and Company Site FY18 OH/GA rates.
 - Must pay University in 60 days or less after invoicing.
 - Must pay back at least \$200K in FY18 for the Advanced Technical Intelligence Center.
- Must recoup at least another \$1.0 M of RDCAP Funding in FY18.
- Establish agile and responsive automated workflows in the areas of Finance, Contracts, Security and Human Resources accessible by WSU and WSRI personnel which improve communication and reduce workload while ensuring transparency and compliance with applicable law, regulation or other guidance.
 - Provide DFARS Compliant ITAR support as required to WSU.
 - Provide Secret, Top Secret and TS/SCI facilities for WSU and WSRI.

ATTACHMENT C

Wright State University and WSARC Independent Research and Development (IRAD) Program*

DRAFT 2-3-18

WSARC seeks to promote the WSU research enterprise by offering WSU faculty the opportunity to perform WSARC focused and funded independent research and development (IRAD) projects in support of DOD research initiatives. WSARC sponsored IRAD funding will be administered through a formal contract between WSARC and WSU, through the Office of Research and Sponsored Programs (RSP). WSARC sponsored IRAD projects require the following:

1. Interested faculty may request consideration for IRAD support through the annual call for white papers process. This vetting process will take place annually in the March timeframe of each fiscal year. These projects will then be reviewed by WSRI staff and awarded as funds are available in the next fiscal year.
2. An IRAD project can start at any point throughout the WSARC fiscal year (1 July to 30 June) depending on the requirement and time criticality of performing the specific IRAD research project. Projects, however, may not run from one fiscal year to the next meaning each project must be done in the timeframe from 1 July to 30 June of a given fiscal year. Projects that require more work over the summer must be staggered over two fiscal years.
3. The responsibilities of the faculty receiving the IRAD project awards are summarized here. The faculty member and/or students will:
 - a. Work collaboratively with a WSRI researcher to complete the work and ensure it meets the DoD requirements of the IRAD program.
 - b. Provide the time and effort required for successful execution of their WSRI -WSARC sponsored IRAD project.
 - c. Promote transparency, ensure compliance, and collaborate across our University.
 - d. Provide IRAD deliverables specified by the IRAD contract.
4. Administration: WSARC- funded IRAD projects will be administered through RSP following the same processes and policies applied to externally funded awards.

Criteria for receiving IRAD funding:

1. Research in this program must be focused on WSRI - WSARC research areas and led by a WSRI researcher or program manager with emphasis on developing new research and development capabilities to better support WSRI DOD customers.
2. Faculty members must obtain approval from their respective College/School Dean prior to submittal of the white paper.
3. The WSRI Executive Director after internal review of the white paper will provide written documentation back to the faculty member and the respective Dean regarding white paper selection approved IRAD budget, and project requirements.

Definitions: *Independent Research and Development (IRAD) is a DFARS allowable cost that enables companies to initiate and conduct research and development (R&D) projects of potential interest to DoD. As an allowable G&A cost to WSARC, funding for IRAD, is provided to the WSARC through reimbursement of its G&A cost rates.

Discoveries and inventions made in the course of the IRAD projects will follow the University Intellectual Property Policy. See: <https://policy.wright.edu/policy/6130-intellectual-property>