



University of Memphis Research Council

Fall 2021 Meeting

10/8/2021

University of Memphis



Remarks from Dr. Dhaliwal

- ▶ Congratulations UMRF Ventures 2021 Professors
 - ▶ Maryam Salehi, Civil Engineering
 - ▶ Ana Doblas, Electrical and Computer Engineering
- ▶ Welcome New Members:
 - ▶ Jeremy Orosz, College of Communication and Fine Arts
 - ▶ Deborah Moncrieff, School of Communication Sciences and Disorders
 - ▶ Mike Gkolas, Civil Engineering



Division of Research and Innovation Updates



Updates:

- ▶ **Office of Sponsored Programs**
 - ▶ Stephanie Thompson
- ▶ Research Compliance
 - ▶ Beverly Jacobik
- ▶ Research Development
 - ▶ Cody Behles

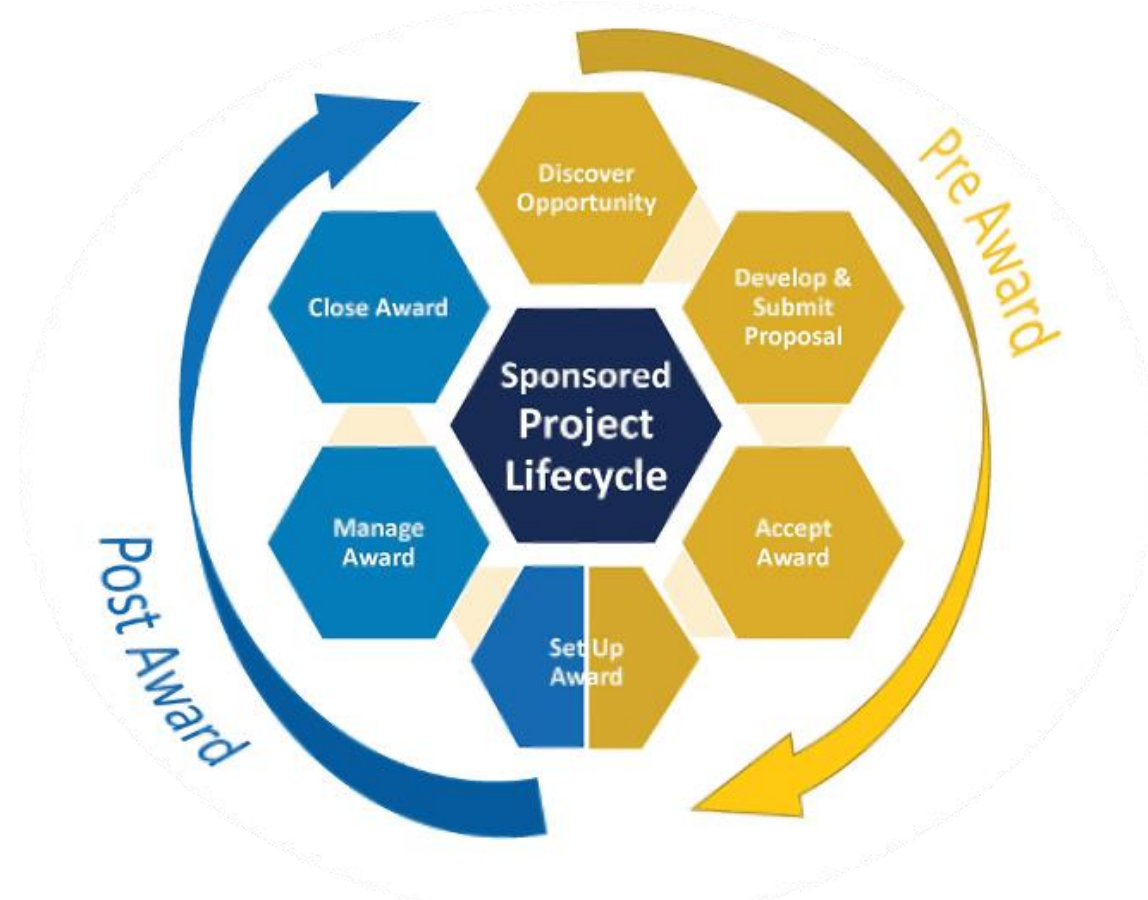
Office of Sponsored Programs (OSP)

Federal
Updates

Internal OSP
Procedures

Project
Lifecycle / Post
Award Support

Project Lifecycle





The OSP Team

- The easiest way to reach us is via e-mail to **OSP@memphis.edu**. Your message will be *acknowledged* within 24-48 hours with an answer or with a timeline for when you can expect one. All team members receive messages sent to this address, thus reducing the risk of delay due to staff being out of the office or under heavy deadlines.
- Stephanie Thompson, Director
sthmps24@memphis.edu
- Laura Wright, Proposal Admin
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- Ashley Yacoubian, Proposal Admin
ayacoubian@memphis.edu
- Margie Robertson, Contract Admin
mrbrtson@memphis.edu
- Lauren Williams, Award Admin
ospawards@memphis.edu
- Leslie Ingram, eRA Admin
cayusesupport@memphis.edu

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Research Compliance

UMRC Updates



- Human Subjects Research (IRB)
- Financial Conflict of Interest (FCOI)
- Export Controls
- Data management, acquisition, sharing and ownership, HIPAA



FY2021 IRB Performance

In FY2021, the Institutional Review Board (IRB) conducted 1220 protocol reviews of 544 unique protocols. These included 90 Full-Board protocol reviews requiring both an administrative and Board review which were conducted in 23.36 calendar days for an average of 11.68 days per review. In the Expedited category of review, 418 reviews were required and completed at an average of 6.21 calendar days. The Exempt category of review required 442 reviews averaging 2.89 days each. 181 initial reviews, closures and minor modifications that required only an administrative review averaged 2.07 days to complete.



IRB/EC Staffing and Budget

Number of Active Studies	Median Number of Studies	Median Number of staff	Median Number of Studies per Staff	Median IRB/EC Budget
All	1582	8.8	179.8	\$646,129
0-500	245	2.8	87.5	\$232,781
501-1000	729	4	182.3	\$383,890
1001-2000	1348	8.5	158.6	\$695,469
2001-4000	2550	12	212.5	\$1,166,461
4001+	6167	23.3	264.7	\$2,422,615

The University of Memphis surpasses national review times while maintaining a current IRB portfolio of 956 active studies. The UofM IRB is not only highly responsive, but it is also a very lean, cost-effective support to our research enterprise.

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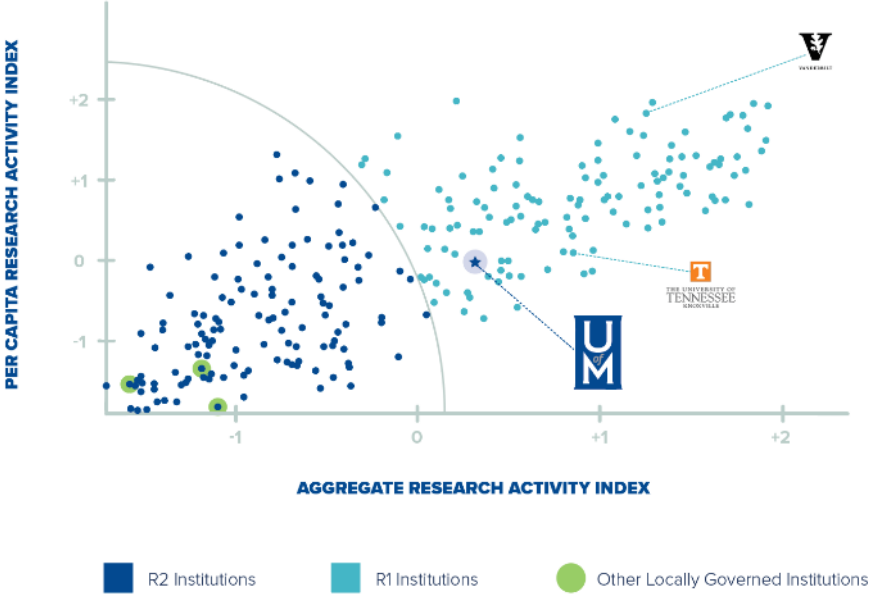
Research Update

Argument for Flagship Status



2021

Progress toward Carnegie R1



The Tennessee State Charter mentions two flagship public universities – UTK and UofM

Comparison Data

2021

2019-20 Chairs of Excellence

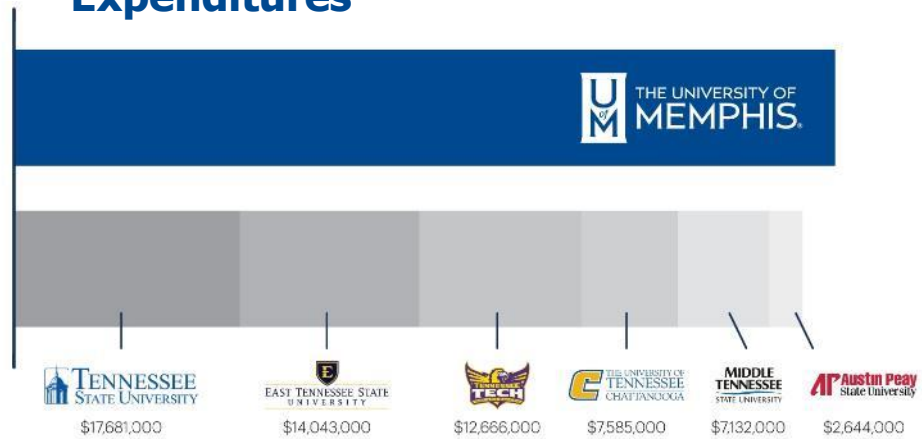
UofM	24
Austin Peay	4
ETSU	8
TSU	2
TTU	2
MTSU	10

2018 HERD Data Research Expenditures

University of Memphis
\$64,297,000



Others Combined
\$61,850,000



Source: 2018 National Science Foundations' Higher Education Research & Development (HERD) survey

NSF Comparative Data

2021

UofM is among the top 25% of NSF Career Recipients Universities in the US.

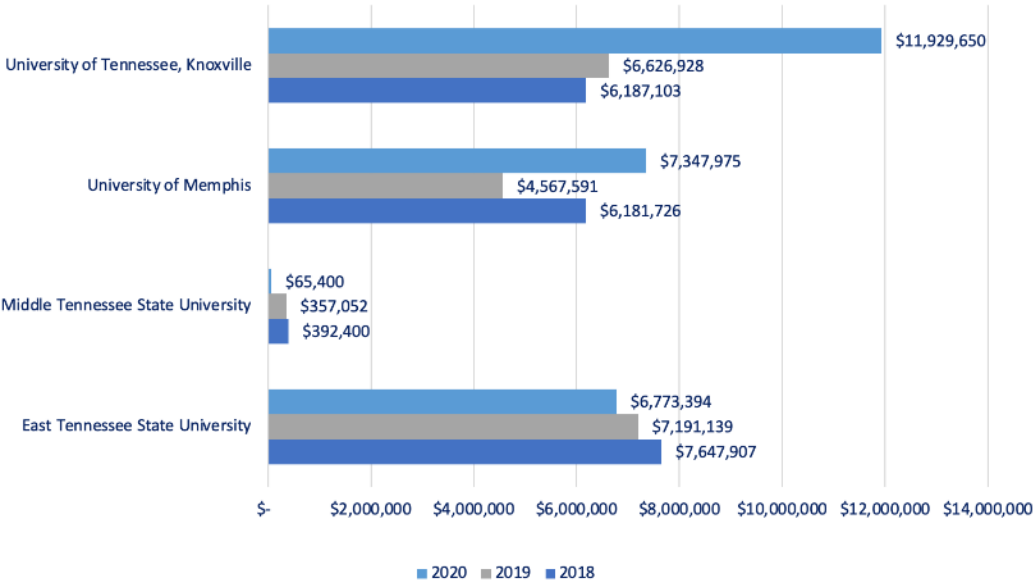
FY19 and FY20	
University	NSF CAREER Stat # of Awards
UTK	11
Vanderbilt (excludes Med)	4
UofM	4
All other LGI Combined	3

FY19 and FY20	
University	NSF Funding Overall
UTK	\$38,691,421
Vanderbilt (excludes Med)	\$49,614,400
UofM	\$13,882,838
All other LGI Combined	\$10,577,132

FY19 and FY20	
University	NSF Education and Human Resources Directorate
UTK	\$3,053,401
Vanderbilt (excludes Med)	\$16,739,970
UofM	\$5,036,190
All other LGI Combined	\$4,709,716

FY19 and FY20	
University	NSF Office of Advanced Cyberinfrastructure
UTK	\$3,898,590
Vanderbilt (excludes Med)	\$0
UofM	\$3,853,139
All other LGI Combined	\$557,542

NIH Comparative Data



BIOMED ENGR/COL ENGR/ENGR STA				
	FY18	FY19	FY20	Total
UofM	\$857,535	\$716,462	\$439,015	\$2,013,012
UTK	\$430,073	n/a	\$679,272	\$1,109,345

SCHOOLS OF ARTS AND SCIENCES				
	FY18	FY19	FY20	Total
UofM	\$3,476,342	\$2,480,070	\$5,587,976	\$11,544,388
UTK	\$2,919,694	\$2,795,970	\$5,476,994	\$11,192,658

SCHOOLS OF PUBLIC HEALTH				
	FY18	FY19	FY20	Total
UofM	\$1,847,849	\$1,371,059	\$1,320,984	\$4,539,892
ETSU	\$860,429	\$1,392,025	\$558,048	\$2,810,502

NIH Comparative Data

UofM outperforms all other state universities in research funding from NIH in comparable programs.

UTK NIH Funded Programs	UofM NIH Funded Programs	ETSU NIH Funded Programs
BIOMED ENGR/COL ENGR/ENGR STA	BIOMED ENGR/COL ENGR/ENGR STA	Domestic Higher Education
Domestic Higher Education	Domestic Higher Education	SCH ALLIED HEALTH PROFESSIONS
EARTH SCIENCES/RESOURCES	SCHOOLS OF ARTS AND SCIENCES	SCHOOLS OF ARTS AND SCIENCES
ORGANIZED RESEARCH UNITS	SCHOOLS OF PUBLIC HEALTH	SCHOOLS OF MEDICINE
SCH ALLIED HEALTH PROFESSIONS		SCHOOLS OF PUBLIC HEALTH
SCH OF BUSINESS/PUBLIC ADMIN		
SCHOOLS OF ARTS AND SCIENCES		
SCHOOLS OF NURSING		
SCHOOLS OF VETERINARY MEDICINE		

Startups and DoE Career Comparison

2021

Startups Launched Using University Patented Technologies

Department of Energy Career Awards

Startups Launched FY20 & FY21	
UofM	6
U. Tennessee, Knoxville	11
Vanderbilt U	13
Other LGI	0

DoE Career Awards FY20 & FY21	
UofM	1
U. Tennessee, Knoxville	1
Vanderbilt U	0

RoadMap To Sustaining R1

2021

Steps to Success

1. R1 Status announced by end of year
2. Launch 2022 Postdoc hiring plan
3. Secure \$2.5m in recurring state dollars for achieving R1
4. Secure \$100m research investment fund

Progress to Date

- 27 New Professorships Created
- 2 First Time NSF Career Recipients in FY21
- \$50+ million in annual research awards
- 19 NSF Career Applications in FY21

Updates on RD Programs



2021

Gap Funding Program

2021

Currently Accepting Applications

The Gap Funding Program is designed to help faculty with encouraging reviews to revise and resubmit to federal funding agencies and national foundations.

Grants of up to \$25k are provided on a competitive, rolling basis until funds are depleted.

Learn more [at this link](#)

Evidence of Success

- 13 Faculty in 9 Departments Provided Funding
- 20 Proposals submitted or resubmitted
- \$4m+ in awards earned to date

Communities of Research Scholars (CoRS)

2021

2022 Applications Currently Under Review

Entering its 4th year, the CoRS program is designed to facilitate interdisciplinary communication by providing faculty with seed funding to form teams to examine new lines of research. Beginning last year, we have also encouraged CoRS to engage with community partners to encourage a more rapid avenue to securing external funding.

Learn more [at this link](#)

Evidence of Success

- 42 CoRS grants in 22 departments and schools

Fine Arts, Humanities, & Social Science Grants

2021

Program Opens in February 2022

Provides funding to support researchers in identified disciplines with the costs of conducting research and scholarship. Specific funding opportunities for subvention, image reproduction, indexing, and field work are provided.

Learn more [at this link](#)

Evidence of Success

- 18 in 14 Departments Provided Funding
- Over 20 creative works and publications created.

Beyond Conversation
Collaboration and the
Production of Writing



William Duffy
Utah State University
Press, 2020

No Future in This
Country: The Prophetic
Pessimism of Bishop
Henry McNeal Turner



Andre E. Johnson
University Press of
Mississippi, 2020

Chilean Cinema
in the Twenty-First-
Century World



Vania Barraza
Toledo, Editor
Wayne State University
Press, 2020

Capacity Building Workshops

2021

Pilot Workshops Conducted January – June, 2021

The workshops were designed to help faculty build community partnerships to improve grantsmithing and increase number of applications for funding.

Participating Faculty

- CCFA (10 faculty)
- Health Sciences (8 faculty)
- College of Education (6 faculty)
- Public Health (1 faculty)
- SUAPP (1 faculty)

Community Partners

- 25 Community Partners Participated including: STAX Music Academy, Shelby County Crime Victims and Rape Crisis Center, Frayser CDC, Arts Memphis, Church Health and many others

PECIR – Meharry Medical School Partnership

2021

The Program to Enhance Collaborative Interdisciplinary Research (PECIR) was designed to stimulate innovative, interdisciplinary, team-based research between Meharry and the UofM.

Learn more [at this link](#)

6 Projects Funded

- “Assessing Vaccine Hesitancy for Flu, HPV and COVID-19 Vaccines in Tennessee” – Seok Won Jin, PhD
- “Inform Future Delivery of Trauma Informed Care in Community-Based HIV Service Organizations (CBO), Faith-Based Organizations (FBO), the Local Health Department (HD), and Federally Qualified Health Care Centers (FQHC)” – Latrice Pichon, PhD
- “A Focus Group Study of the Communication and Educational Needs of Parents and Patients with Sickle Cell Disease or Sickle Cell Traits” – Amanda Young, PhD
- “Elucidating Mechanisms for the Sexually Dimorphic Response to Diet Induced Obesity and Metabolic Syndrome” – Melissa Puppa, PhD
- “Discovery of Exosome-based Molecular Biomarkers for Predicting Prostate Cancer Impending Metastasis” – Yongmei Wang, PhD
- “Eliminating Socially-Driven Infant Obesity Disparities in Minority Communities of Memphis and Nashville: A Community-Based Intervention” – Angela Antipova, PhD

NIH Strategic Support

2021

Activities

- Four-part NIH series conducted in September.
- External Review being provided to all federal grants that request the service until resources are depleted.
- NIH K Series workshops held last May

Evidence of Success

- Increased variety of NIH mechanisms being pursued including K and T series opportunities
- Q1 FY22 Increased Total Number of NIH Proposals submitted increased 22%, higher than past three fiscal years.

NIH funding has not grown at the same pace as NSF funding over the last three FY. These programs attempt to correct this.

For More Information

CONTACT

Cody Behles cbehles@memphis.edu | 901.678.2648



2021



Task Force Reports/Updates



Updates:

Task Forces Presenting:

- **Research Technology Advisory Committee (Hongmei Zhang)**
- Research Centers, Institutes, and Labs Task Force (Chuck Langston)
- Federal Funding Response Task Force (Stephanie Ivey)
- Aligning T&P Promotion Process to Carnegie R1 Culture Task Force (Santosh Kumar)
- Faculty Teaching Buy Out Policy Task Force (Andrew Olney, Kim Oller)
- Policy on Equity Holdings Task Force (Hai Trieu)

Other Task Forces

- Export Controls Task Force (Zanskas/Jacobik)
- Strategic Research Plan (Brian Waldron)
- Research Policies, Intellectual Property (Gary Bowlin)
- Sponsored Programs, Grants, Contracts & Agreements (Alfred Hall)
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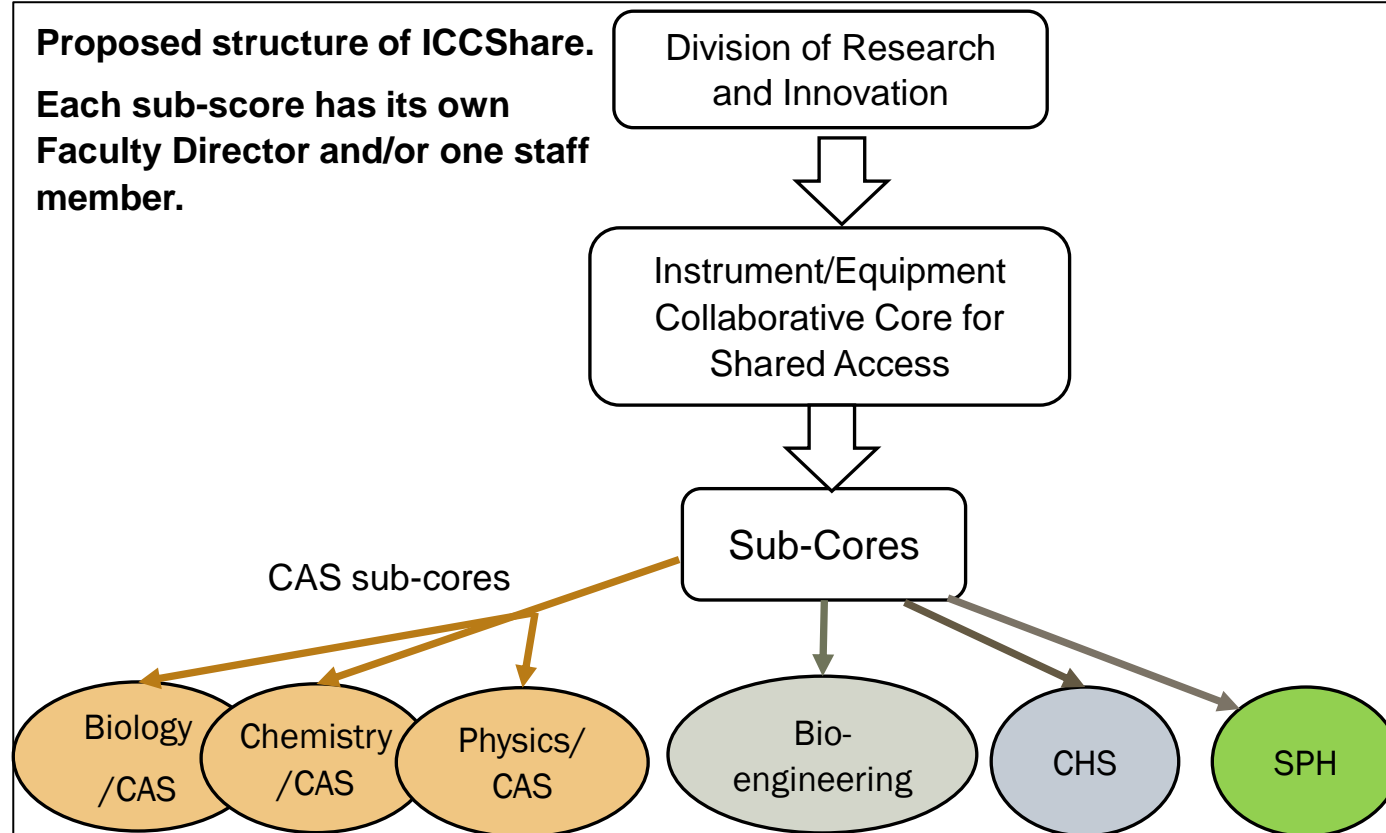


Research Technology Advisory Committee

HONGMEI ZHANG

The ICShare Proposal

Proposed structure of ICCShare.
Each sub-score has its own Faculty Director and/or one staff member.

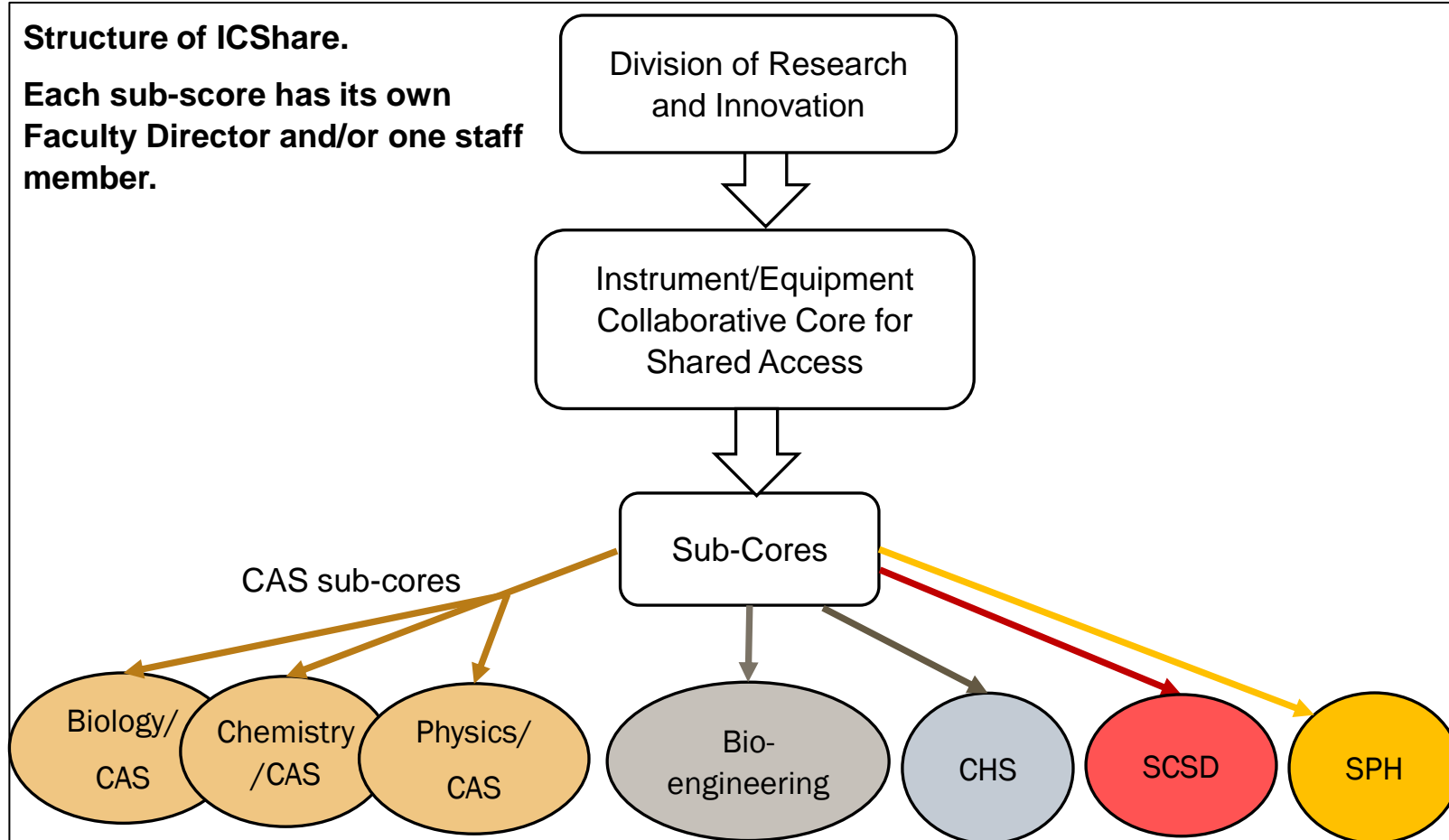


Update on the proposal

- The proposal was approved by UMRC (April 1st, 2021)
 - School of Communication Sciences and Disorders (SCSD) joined and was included in the proposal submitted to the Research and Innovation.

Structure of ICShare.

Each sub-core has its own Faculty Director and/or one staff member.



RTAC 2021-2022

- Need more members to serve on the committee
 - The committee focuses on research related technology, instrument, and equipment.
 - Faculty members' research involving these components are highly encouraged to join the committee.
- Need a new Chair

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Federal Research Funding Response Task Force



Committee Charge

The University of Memphis Federal Research Funding Response Task Force was established in May 2021 to monitor activity related to anticipated significant increases in federal spending for research.

The Task Force was charged with developing a set of recommendations that will best position the UofM to successfully respond to and take advantage of new federal funding opportunities.



Federal Funding Landscape

- *The U. S. Innovation and Competition Act (formerly known as the Endless Frontiers Act)* – Bipartisan legislation passed in the Senate that includes substantial increase in funding for the National Science Foundation. This includes establishing a new Technology and Innovation Directorate to strengthen the U.S.'s position related to critical technologies through basic and applied research.
- *Infrastructure Investment and Jobs Act* – Bipartisan legislation passed in the Senate that legislates significant funding for transportation (all modes), energy, drinking water and wastewater, and broadband infrastructure.



Federal Funding Landscape

- Focus on critical technologies: Artificial intelligence, high-performance and quantum computing, robotics, advanced manufacturing, cybersecurity, advanced communications technology, biotechnology, and advanced energy technologies.
- Expanded funding for interdisciplinary STEM research
- Expansion of public-private R&D efforts and entrepreneurship
- Focus on equity and access
- Workforce development – with specific emphasis on increasing diversity in STEM disciplines

Institutional Gaps

- Research Support
 - Pre- and post- award
 - Federal government relations
- Research Culture
 - Core research focus areas
 - Research visibility
- Institutional Capacity
 - STEM faculty
 - Partnerships



Recommendations

- Strengthen research support by investing in pre- and post- award staffing and dedicated federal government relations.
- Strengthen research culture by developing a core set of research focus areas that are communicated widely and highlight multidisciplinary collaborations. Ensure all divisions of the University are on board with a research-forward mindset that is required for R1 institutions and that this is evident in all university communications.
- Increase institutional research capacity through strategic hires and partnership development. A coordinated approach to development of strong cross-disciplinary relationships on our campus (that include both STEM and non-STEM faculty) as well as partnerships with HBCUs, MSIs, institutions with complementary expertise, and industry is needed.

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Recommendation:

- ▶ **Equity in lieu or in addition to Cash Payment**
- ▶ UMRF may elect to accept equity in lieu of cash payments for a license fee or royalty. The decision to accept equity in lieu of cash is made at the sole discretion of the UMRF and does not constitute an obligation on behalf of the UMRF to make a disbursement of equity to the creator(s) or to department(s) and college(s) until the equity is sold. UMRF will own and exercise all rights of ownership, including the rights to vote equity interests on all matters which are subject to the consent or approval of the holders of similar equity interests (including voting such equity interests for the election of the directors, approving or disapproving amendments to articles of incorporation, etc.). UMRF will retain and own the equity interest until the sale or exchange of the interest. The decision as to when to sell or exchange equity resides with the UMRF Board of Directors in its sole discretion. **Upon the sale or exchange of the equity, the inventors, as a group, receive the same fraction of revenue derived from equity as they would for the Royalty distribution mentioned above. These guidelines and policies also apply to all University spinout companies.**



Call For New Task Force Creation





Institutional Review Board

Concerns have been raised about delays and inefficiencies in the IRB review system – esp. full board

- **Expedited reviews work well, full board reviews often take 3+ months and multiple reviews**
 - Some contracts have been lost due to delays
- **Contingencies are often inconsistent and vague**
- **Some units have discontinued direct human subjects research – now do secondary analysis only**
 - Even for PhD students, which puts them at a significant disadvantage in their careers
- **Many IRB members do not regularly attend board meetings**

Proposals/motions for today

- **Create UMRC subcommittee – recommendations for substantive changes to EVPR in Spring 22**
- **Recommend two immediate actions to EVPR**
 - **Designate IRB comments as “Contingency” or “Condition”, allow IRB admin to approve revisions to latter without board review**
 - **Review IRB member attendance at board meetings and replace insufficiently active members by Jan 22 or earlier**

A summary of points raised at Sept 2021 faculty/admin meeting on this topic is appended



Open Forum/Other Business





Adjournment

