# Memorandum of Understanding Between the Institutions of the Mississippi Research Consortium for Reciprocal Access to Shared Resources

This Memorandum of Understanding (MOU) is entered into on the <u>19th</u> day of <u>May</u>, 2025, by and between the four undersigned academic research institutions: Jackson State University, Mississippi State University, University of Mississippi and the University of Southern Mississippi, all of which are Mississippi Institutions of Higher Learning (individually an "Institution" and collective, the "Institutions" or "Parties"). This MOU is entered into for the purpose of reciprocal access to shared resources between the Institutions. Encouraged by Mississippi's expanding research ecosystem, the Institutions seek to enhance collaboration, cooperation and interaction between Mississippi institutions of higher learning in a manner that effectively and efficiently utilizes existing resources of each Institution.

#### I. Background

The Institutions have individually made significant investments to acquire specialized equipment and establish unique research cores supporting basic research. To further enhance the availability of these existing resources, the Institutions seek to share, in an economical manner, specialized technical services and access to equipment and expertise for research purposes.

- II. This MOU sets forth the understanding of the Institutions concerning reciprocal access to shared resources. The purpose of the MOU is to document (a) the intent of each Institution to provide reasonable access, as capacity will permit, to its specifically identified shared resources and (b) the policies and conditions governing such access. For purposes of this MOU, "Shared Resources" means the research equipment and expertise, cores, facilities and/or services specifically identified by an Institution that shall be made available to the other Institutions pursuant to this MOU. General Understanding:
  - A. By participating in this MOU, the Institutions agree to and shall cooperate in good faith to encourage access to each Institutions' respective Shared Resources for research purposes. Pursuant to this MOU, each Institution may designate individual faculty members as investigators to utilize the shared resources subject to this MOU in support of research (Investigators).
    - 1. An Investigator must be a member of a participating Institution's faculty, permanent research staff, or under the direct supervision of such faculty member or research staff member at his or her respective Institution.
    - 2. Each Institution shall identify a key representative(s) to coordinate efforts to utilized shared resources pursuant to the terms and condition of this MOU.
    - 3. Institutions may charge Investigators of other Institutions fees for the utilization of shared resources owned by the respective Institution. Said fee shall not exceed the fees charged to the Investigators of charging Institution for internally funded activity. The fees charged shall not include any expense properly allocated as indirect cost on Subawards or Subcontracts pursuant to an indirect cost rate agreement of the charging Institution.

- 4. Each Institution shall invoice other Institutions utilizing shared resources as requested by the Investigator of that Institution. The Investigator is required to provide appropriate billing information to the charging Institution before the shared resource is provided.
- 5. The Institutions shall review performance under this MOU biannually for any required or appropriate amendments. This MOU may be amended by mutual written agreement of and executed by the Institutions of this MOU. Any and all such amendments to this MOU shall be binding as to an Institution only upon the execution of such amendment by a duly authorized signatory of the Institution.
- 6. Each Institution shall ensure the instrumentation indicated on Addendum B be properly maintained and available as long as it remains viable in the relevant research fields.
- B. The Parties agree that priority shall be given to Investigators of its respective Institution over another Institution's Investigator when determining the availability of shared resources. The Institutions acknowledge and agree that shared resources of another Institution may be utilized only when said shared resource is available.
- C. This MOU extends only to the shared resources at the respective Institutions as indicated on Addendum B.

## III. Term, Renewal, and Termination

- A. This MOU shall be effective as of June 1, 2025 (the "Effective Date") and shall remain in full force and effect for eight (8) years thereafter or until May 30, 2033, unless terminated earlier in accordance with this MOU.
- B. Any Institution may terminate this MOU, unilaterally, with respect to such Institution by providing 60 days advance written notice to the other Institutions of this MOU.

#### IV. Administration

- A. Investigators who seek to utilize shared resource subject to this MOU shall contact the Institution's key representatives as set forth in Addendum A.
- B. The key representative of the supplying Institution will be responsible for submitting the required invoice for goods or services rendered to Investigators pursuant to this MOU and for providing copies of the invoices to the appropriate representative of the ordering Institution.

## V. Intellectual Property

- A. Except in making the shared resources known to faculty, no Institution may use the other Institutions' names, logos or marks, or any derivative thereof, without the prior written permission of the Institution whose name, logo or marks, or derivative thereof, are proposed to be used.
- B. Ownership and other rights in and to intellectual property of the Institutions shall not be affected by this MOU. The Institutions intend for ownership of intellectual property rights to vest in the employer of the individual inventors and/or authors according to the intellectual property policy of the Investigator's institution. Unless otherwise agreed to in

a writing signed by duly authorized representatives of an Institution, mere usage of a Shared Resources shall not entitle the provider of the Shared Resource to any ownership or usage rights of intellectual property belonging to another Institution.

### VI. Liability and Insurance

A. The Institutions agree that this MOU does not create a joint agent relationship between the parties and no representative of one Institution shall serve as the agent of any of the other Institutions of this MOU, and no Institution shall be liable for the wrongful acts or negligence of the other Institutions of this MOU. Additionally, each Institution acknowledges that use of another Institutions' shared resources may involve exposure to potentially hazardous conditions.

## VII. Confidentiality

- A. Each Institution agrees not to disclose, except as required by law, to any third party or to use, directly or indirectly, for a period of five years after disclosure, any proprietary and confidential research data or other similar information of which the Institution may become aware as a result of using Shared Resources of the other Institutions, or as a result of having other institutions use its Shared Resources. For the avoidance of doubt, such information shall be marked "confidential" and proprietary" at the time of disclosure.
- B. Notwithstanding the preceding provision, the obligations of the Institution receiving confidential information (the "Receiving Institution") from another Institution do not include: (i) information that, at the time of disclosure, was published, known publicly, or otherwise in the public domain; (ii) information that, after disclosure, is published, becomes known publicly, or otherwise becomes part of the public domain through no fault of the Receiving Institution; (iii) information that, prior to the time of disclosure, is known to the Receiving Institution as evidenced by its written records and is not then subject to an obligation of confidentiality to any third party; or (iv) information that, after disclosure, is made available to the Receiving Institution in good faith by a third party under no obligation of confidentiality and without restriction on its further disclosure by the Receiving Institution.

## VIII. Conduct Compliance

- A. Each Institution shall require all employees, agents and students (if applicable) who use Shared Resources provided under this MOU to observe all applicable policies, rules and regulations of the Institution providing the Shared Resources.
- B. Each Institution shall comply with all applicable laws and legal requirements in connection with the activities contemplated by this MOU.
- C. This MOU shall be governed in all respects by the laws of the State of Mississippi without regard to its rules regarding conflict of laws. Any action to enforce the obligations of this Agreement shall be brought and maintained exclusively in the state courts of the State of Mississippi.

[Signature Page Follows]

## Memorandum of Understanding

## Between the Institutions of the Mississippi Research Consortium for Reciprocal Access to Shared Resources

Dated: May 19, 2025

Approved by:

Almesha Campbell (May 16, 2025 20:52 CDT)

Almesha L. Campbell Vice President for Research and Economic Development Jackson State University

Julie Jordan Julie Jordan (May 17, 2025 08:56 CDT)

Julie B. Jordan Vice President for Research and Economic Development Mississippi State University

nam (May 19, 2025 10:38 CDT)

John C. Higginbotham Vice Chancellor for Research and Economic Development University of Mississippi

Kelly Lucas (May 18, 2025 20:31 CDT

**Kelly Lucas** Vice President for Research and Sponsored Programs University of Southern Mississippi

## Addendums A: Institution's Key Representatives for Shared Resources

## Jackson State University Glake Hill College of Science, Engineering and Technology glakeh@icnanotox.org 601.979.1699

Mississippi State University Katie Echols Office of Research and Economic Development <u>katie.echols@msstate.edu</u> 662.325.3570

University of Mississippi Jason Hale Office of Research and Sponsored Programs jghale@olemiss.edu 662.259.0544

#### University of Southern Mississippi

Erica Kennedy Office of Research Administration erica.kennedy@usm.edu 601-266-4123

## Addendums B: Shared Resources for Each University

### Jackson State University

- Spectrofluorometer
- Agilent Cary 60 Spectrophotometer
- Super Gamut NIR spectrometer
- Wasatch Raman spectrograph
- Olympus U-RFL-T Fluoresent Microscope
- Perkin Elm FTIR Spectrum2 Spectrometer
- Solar cell J-V curve measurement system
- Solar cell Incident Photon to Current Efficiency (IPCE) measurement system
- Spraybase Electrospinning Equipment
- Keithley 2600 Series Source Meter
- Inductively coupled plasma optical emission spectrometry (ICP-OES) (Shimadzu, ICPE 9000)
- Gas chromatography-mass spectrometry (GC/MS) (Agilent Technologies, 7890A/5975C)
- Dispersive X-ray spectroscopy (EDX) (Shimadzu, DX-720)
- MTS Nanoindenter
- Nano universal testing machine

### **Mississippi State University**

#### I2AT Resources

- Axiovert 200M Inverted Research Microscope
- Dimension ICON AFM with ScanAsyst
- BioScope Catalyst AFM with ScanAsyst
- JEOL 6500F Field Emission SEM with Oxford's X-max 50 EDS
- Zeiss Supra 40 SEM with Kammrath-Weiss's insitu Tensile and Compression Module
- JEOL 2100 LaB6 200KV TEM with Oxford's X-max 80T EDS
- Nikon XHT225ST 225KV Xray CT System with Rotating Multi-metal Reflection and Transmission Target
- Rigaku SmartLab X-ray Diffraction System with Anton Paar Domed Hot Stage (to 900°C)
- EMS 150ES Sputter Coated and Carbon Evaporator
- Reichert-Jung Ultracut E Ultramicrotome
- Fischione Model 200 Dimpling Grinder
- Leica TiC3x SEM Ion Mill
- Leica Res102 TEM Ion Mill
- SBT MODEL 650 Low Speed Diamond Wheel Saw
- SBT MODEL 310 Disc Punch
- SBT PC 2000 Plasma Cleaner
- SBT Rotary Die Cutter
- Keyence VHX 7000 Optical Microscope
- Zeiss LSM 510 Confocal Microscope

- Struers Minitom Low Speed Diamond Saw
- Struers Tegramin Grinding/Polishing Machine
- Buehler's Vibromet Vibratory Polisher
- Critical Point Dryer, Tousimis 931.GL
- Struers TegraPol-11 Polishing Machine
- TA Instruments RSA-G2 DMA/ Solids Analyzer
- TA Instruments ARES-G2 Rheometer

#### Athlete Engineering Resources

• Gait Real-Time Analysis Interactive Lab (GRAIL) System Surface Electromyography (sEMG) Sensors

#### NMR Lab Resources

800 MHz Nuclear Magnetic Resonance (NMR), including Broadband Probe

#### Mississippi INBRE Proteomics Facility

- Waters Xevo G2-S Mass Spectrometer
- Thermo Scientific LTQ Velos Mass Sepctrometer
- Thermo Scientific LTQ OrbiTrap Velos Mass Spectrometer
- Applied Biosystems MALDI TOF/TOF 4700
- ProteinSimple Wes Capillary Western Blot Instrument
- BioRad Protean IEF Cell
- BioRad Electrophoresis Cell

#### Mississippi INBRE Metabolomics & Lipidomics Facility

- TSQ Quantis Plus Triple Quadrupole Mass Spectrometer
- Orbitrap Exploris 240 Mass Spectrometer

#### University of Mississippi

- Helios Fire: Ultrafast UV-Vis-NIR320-2400
- Helios IR: Ultrafast IR2000-13000
- Laser for Helios Fire Instruments
- Fourier Transform Infrared (FTIR) Imaging Microscope
- Quartz Crystal Microbalance with Dissipation (QCM-D)

#### Mississippi INBRE Cell Bioenergetics Facility

- IVIS Lumina Series III
- Bigfoot Spectral Cell Sorter
- Attune NxT Flow Cytometer
- Cytation C10 Confocal Imaging Reader with BioSpa 8 Automated Incubator
- Cytation 5 Cell Imaging Multi-Mode Reader
- Lionheart LX Automated Microscope
- Seahorse XFe96 Analyzer
- iBright CL750 Imaging System
- QuantStudio Absolute Q Digital PCR System

- Chromium iX Single Cell System
- 4150 TapeStation System
- QuantStudio 3 Real-Time PCR System
- SimpiAmp Thermal Cycler
- Qubit Flex Fluorometer
- Countess II Automated Cell Counter
- Sorvall Legend Micro 21R Microcentrifuge
- Sorvall X Pro Series Centrifuge

## University of Southern Mississippi

#### School of Polymer Science and Engineering

- Near IR Fluorescence Microscope and Camera
- Photodiode Characterization
- Probe Station
- Superconducting Quantum Interference Device Magnetometer
- Cryo- Transmission Electron Microscope (TEM)
- Liquid Chromatography-Mass Spectrometer System

#### Mississippi INBRE Imaging Facility

- Leica STELLARIS STED Super-Resolution Confocal Microscope
- Zeiss LSM 510 UV/META Confocal Microscope
- Nikon ECLIPSE 80i Fluorescence Microscope
- Leica M165 FC Stereomicroscope
- Leica DM IL LED Fluo
- Sutter XenoWorks Digital Microinjection System
- BioRad ChemiDoc MP Gel Documentation System
- GE Typhoon FLA7000
- Syngene GeneGnome XRQ
- SpectraMax M3 Microplate Reader
- Biotek Synergy H1 Microplate Reader
- Invitrogen Countess II FL Automated Cell Counter
- Lonza 4-D Nucleofector Electroporation System
- BD LSRFortessa Cell Analyzer
- NanoDrop ND-1000
- NanoDrop OneC
- CFX 96 Quantitative Real-Time PCR Detection System
- BioRad T1000 Thermal Cycler
- Agilent Bioanalyzer 2100
- Beckman Coulter Optima XPN-80 Ultracentrifuge
- Zeiss Sigma VP Field Emission G-Scanning Electron Microscope
- Bruker Icon Atomic Force Microscope
- Xenocs Xeuss Small-Angle/Wide-Angle X-ray Scattering SAXS/WAXS
- CEM Liberty Blue Automated Solid Phase Peptide Synthesizer
- CEM Prodigy Preparative HPLC